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BALTIMORE, SEPTEMBER 5, 1907.

CALL TO THE CONSERVATIVE SOUTH.

Has not the time come for the business men of the South—men of every profession and every character of business, farmers, merchants, manufacturers and all others interested in the real welfare of this section as distinguished from the time-serving politicians who seek only their own preferment regardless of all else—to come together in towns and State meetings to organize for conservatism and protection to property as against the wild populism of the day? Every man's business prosperity is being endangered. Railroad expansion is being halted because capital cannot be had for extensions or for new roads. Industrial enterprises cannot be advanced as would be the case under better conditions. Men of thought see these facts. They know something of what this condition means to themselves and to the South as a whole, for while many Southern States have not joined the populist cry, the whole South suffers from the action of a few.

Knowing these conditions, why should not the real business leaders and property owners, the men of affairs, come together and take a decided stand against the politicians and their destructive policies? Such meetings in

every community headed by the wisest men of each town or county and State would have a great effect upon local sentiment and likewise upon the outside business world. Men of the South owe it to themselves and their section to let the world know that they are fighting the battle of conservatism against the radicalism of the day.

The States wherein legislation, enacted or threatened, has brought about the present state of affairs should take the lead, but if they will not, why should other Southern States not do so and announce their position to the world? If West Virginia or Tennessee or South Carolina or Kentucky, or other States which have thus refused to join in the campaign of destruction, should hold such meetings and pledge themselves by all the united power of the sane people of the State to stand for fair dealing, for encouragement to capital and guarantee that it should be protected, they would draw to themselves the forces which make for business expansion and prosperity. Yea, for more; for business morality and honesty. Great is the opportunity for some State to lead in such a movement and to rally to itself the conservative influences of the country. Into that State, when once the world saw that it meant to carry out such a program, would flow millions of capital for investment and thousands of settlers who want to build their homes in a land free from the wild sweep of agrarianism and of hostility to all vested interests. Who will lead?

LABOR BUREAUS.

Referring to a report that under a new commissioner the North Carolina Bureau of Labor and Printing will cut down its annual report from a book of 350 pages to a pamphlet of 50 pages, the *Evening Chronicle* of Charlotte calculates that the change will save the State a great item in the cost of printing and paper, and will produce instead of a mass of obvious padding a compact, intelligent and useful statement of the industries of North Carolina. The thought might well be amplified into the statement that if the average bureau of labor under State auspices should be abolished the State would not only be relieved of unnecessary expense for the support of the bureau, but would be relieved of an actual incubus upon the industrial progress of the State. The average bureau of labor is a creation of politics pandering to a distinct class in the State, and naturally becomes primarily a hotbed for the propagation of erroneous and dangerous opinions about the relation

of the State government to the people of the State and a menace both to labor and to capital. The average occupant or real executive of such a bureau

is some politician otherwise out of a job or some agitator incapable of presenting intelligibly the facts about conditions that are brought to his attention.

AN EPOCH-MAKING GATHERING FOR THE COTTON TRADE.

The movement inaugurated three years ago by the MANUFACTURERS' RECORD to bring about a convention in the South of the cotton spinners of the world is now to be realized. At the time when the cotton manufacturers of Great Britain and Europe were seeking the aid of their governments in an effort to encourage the growing of cotton in Africa and elsewhere, in order to lessen their dependence upon the South, the MANUFACTURERS' RECORD got into correspondence with the leaders in these movements and wrote them that if they would come to America and for themselves study the possibilities of cotton-growing in the Southern States they would see that, given a fair price for cotton, it was possible for this section to increase its production rapidly enough to meet the world's increasing needs, and that it would be far more profitable for the cotton consumers of Europe to fully understand this situation and lend their co-operation to the expansion of cotton-growing in the South than undertake the losing venture of seeking to develop cotton-growing in other lands. This suggestion was warmly received by the foremost cotton spinners of Europe, as well as by the business organizations of the South, but when it was desired that an official invitation should be extended by the cotton manufacturers of this country, since the European spinners stated that they felt that they could not come as a body without a formal request of American spinners, the New England Cotton Manufacturers' Association took the ground that, as the trip would largely be confined to the South, the invitation should come from Southern cotton manufacturers. But the Southern Cotton Spinners' Association, led by a few members who took a very narrow view of the situation, declined to send such an invitation, their private reason, as expressed in many cases, being that they preferred that the cotton manufacturers of England should not come South for fear that they might decide to establish mills in the South. One leading manufacturer in the Carolinas wrote to the MANUFACTURERS' RECORD and stated that, as the English spinners were the smartest business men in the world, he was very much opposed to inviting them to come South for fear that they might be so well pleased with this section that they might locate in the South and thus come in competition with Southern manufacturers. Another reason given was that the cost of entertainment would be large. The MANUFACTURERS' RECORD met this by offering to contribute \$1000 and to practically guarantee to raise an amount sufficient to cover the general entertainment of the delegates from Europe.

However, adopting the old saying that "all's well that ends well," time has proved the wisdom of the course pursued by the MANUFACTURERS' RECORD, and those who three years ago were unwilling that the spinners of Europe should come South and study the advantages of this section are now active advocates of the coming International Cotton Spinners' Convention, having seen their mistake. The MANUFACTURERS' RECORD knew that in time the people of the whole South, manufacturers and all others, would take the broad view of this movement, so ably advocated by many of the foremost State and municipal authorities of the South, by the bankers of this section, and by the Georgia Manufacturers' Association, representing the entire cotton mill interests of Georgia, all of whom heartily united in invitations to the European spinners, these invitations having been sent through the MANUFACTURERS' RECORD and by it cabled to the president of the International Cotton Spinners' Union.

We rejoice in the culmination of this movement and in the fact that 200 or more of the foremost cotton manufacturers of Europe are now expecting to visit the South early in October. About 170 delegates have already been appointed. It is the first time in the history of the cotton trade that such a thing has been done. It is the first time that spinners of Europe, who pay to the South \$500,000,000 a year for the raw material which they buy from this section, have ever come in a body to the South to study all phases of cotton production, cotton handling and cotton manufacturing. This visit will mark an epoch not only in the cotton trade of the world, but an epoch in the business life of the South. It will result in a wider discussion throughout this country, as well as in Europe, of the vastness of the cotton interests of the world and of the tremendous advantage which the supremacy in this industry gives to the Southern States. Every important paper, daily and weekly, in Europe and America will give to this subject, by reason of the interest aroused in such a visit of English spinners, more attention than has ever before been given to the limitless potentialities of the South through this practical monopoly of the world's cotton production. Well may the South prepare to give to these English visitors, who in their trip through this section will be joined by many of the leading cotton spinners of New England, a right royal welcome. Once more the work of the MANUFACTURERS' RECORD in behalf of the South is to find its full fruition. We doubt whether the MANUFACTURERS' RECORD has ever done for the South a work of more far-reaching importance than in this suggestion, first made by it, of an international cotton spinners' gathering in the home of the world's center of cotton production.

WHERE THE RAILROADS ARE "AT."

An opinion which indicates how the unwisdom and injustice of the late session of Texas' law-making body is viewed at home is presented in the following from the *News* of Port Arthur, Texas:

Efforts of the last Legislature to legislate everything off the map are having their effect in ways that affect Port Arthur and East Texas in a decidedly unpleasant manner. The latest evidence of this fact is found in the decision of the Missouri, Kansas & Texas to defer building its line into East Texas to a tidewater outlet at Port Arthur until more favorable conditions come about.

It appears that the railroad company referred to (the Missouri, Kansas & Texas) proposed to begin work this year on extensions which would link up a detached piece of road belonging to it with the rest of the system, connections being made from each end of that line, but a prominent officer of the company is now quoted as saying that plans for immediate work thereon have been abandoned because of certain acts passed by the Legislature. No hint is given as to when construction may be expected to begin.

The utterance of the Port Arthur *News* will doubtless find many an echo in other parts of Texas, as well as at home, before the year is ended, if not at present. There is nothing doing there by any of the big railroad companies in the way of new work. Construction which was started is being finished, but that is all, excepting necessary maintenance. This condition seems likely to continue indefinitely, and must incline to retard the development of the State. There is no encouragement to build into new country with the hope of inducing settlement and resultant traffic, because the laws embody such restrictions as to eliminate prospects of profit in thoughts of the future. With the cost of equipment, materials and labor all much higher than they were only a very few years ago, the railroads are confronted by onerous regulations that lessen profit, and they are in truth and verity in the situation aptly described by the phrase "between the devil and the deep sea."

FOREIGN MARKETS FOR COAL AND IRON.

With steel rails selling in England at a higher figure than the price of rails in this country, with coal commanding \$6 a ton, the wholesale rate for high-grade bituminous, and with operators unable to meet the demand just at a time when there is a weakening tendency in the iron market in this country, we may, perhaps, see our iron and coal people undertake to go after foreign trade with much vigor. The safety valve of our iron and steel interests may prove to be the foreign markets, but this would not be an indication of healthy trade. On the contrary, it would simply show that the development of our own country, which for 10 years has taxed the productive power of our industries, has been halted by legislation, enacted and threatened, and that our iron and steel people were saving the situation, so far as they are concerned, by looking to foreign countries where no such legislative destruction of business is under way.

As bearing on this subject, the *Colliery Guardian* of London of August 23, in referring to the remarkable activity in the coal interest of Great Britain, says:

No little excitement was caused on Tuesday by an announcement, on what appeared to be good authority, that the Navigazione Italiana had purchased 200,000 tons

of American coal at \$2.75, or just over 11s. per ton f. o. b. With freight rates from the States to the Italian ports ranging from 9s. 4½d. to 11s. per ton, the price of the coal delivered at its destination approximates closely to 21s. per ton, as compared with a c. i. f. price of 25s. to 26s. per ton for Cardiff steam coals. This is not the only purchase which has been made of American coals. German consumers must also have bought very largely, judging from the number of vessels which have been chartered for Dutch ports, but these transactions have not had the slightest effect on the Welsh market, which is stronger today than when those purchases were made. The labor question is no unimportant factor in the situation. Wages are so high now that the miners are taking unusually long holidays, and this will mean a considerable curtailment in the production.

This is the first announcement that a large number of vessels have been chartered to load American coal for German ports, but the *Colliery Guardian* ought to be in a position to get at the exact facts.

CONTROLLING THE PRESS.

The semi-satirical suggestion in *Harper's Weekly* of Federal control of the newspapers of New York city, designed, apparently, to fasten attention upon the extravagances in attempts at Federal regulation of industries generally, may, after all, have a modicum of realization not merely for the newspapers of New York, but for the periodical press of the whole country, if the people of the country do not awaken to the significance of administrative tendencies and adopt proper means for suppressing them.

As long as more than one person in the country can seriously favor national legislation seeking to cure social ills by preventing the transportation from one State to another of goods in the production of which it is imagined the social ills originate, so long will it be possible for some Federal administration to aim at regulation of any undertaking unlimited, directly or indirectly, by State lines. The attempt by such an administration to control the press more openly and positively than it is now possible to control it would be one of the most likely policies to be adopted in furtherance of the desire to control any other undertaking. The machinery for such control has already been invented. That fact, which was quite prominently before the public six or seven months ago, may have been forgotten by the general public, but it is nevertheless a fact which may be given potency unless the public is kept upon the qui vive.

The invention appeared in a report of a joint commission of Congress authorized to make inquiry regarding second-class mail matter. The commission was an outcome of the discussion of the income and expenditures of the Postoffice Department, turning upon the incorrect contention that second-class mail matter involved unnecessary burdens upon the mail and looking to some "reform." The report of the commission carried with it a bill which might have been properly entitled "An Act to Suppress the Freedom of the American Press." The spirit of the report, a spirit pointing straight to Governmental control of the press, was clearly manifested in the following sentiment:

The newspaper is rapidly being extended into the magazine field at the sacrifice both of the postal revenue and the true mission of the newspaper.

The report then arbitrarily states that the miscellaneous matter contained in certain issues of a newspaper "must of necessity lack the quality to make it socially and educationally valu-

able," as the vast volume of matter contained in it "must prove abortive for the mere want of time."

However opinions may differ about the propriety of publishing or reading a particular issue of a newspaper, there can be hardly more than one opinion about the propriety of a Congressional commission assuming to place a semi-governmental stamp of approval or disapproval upon the social or educational value of any reputable newspaper. But the commission undertook to define in its proposed bill a second-class periodical as exclusively one "published for the dissemination of current information, or for the presentation, discussion or treatment of current topics in relation to literature, the sciences, arts or some special industry." That definition is full of pitfalls for the unwary and full of opportunities for administrative interpretation, an evil against which all movements for reform in Government should be directed. The proposed bill has this further definition:

A newspaper or other periodical may be in part composed of advertisements which are permanently inserted in or attached to the same; but such advertisements shall not constitute more than 50 per centum of the superficial area of any issue of the publication.

If the Federal Government is once empowered to limit in a periodical the space to be occupied by advertisements, it will be on the fair road to power to limit the size of advertisements and the price to be charged for them, and will be ready to insist that even the reading matter shall be of a character to satisfy the whim of some one official or of a commission as to its "educational" value or "its true mission as a newspaper," or else the periodical shall not be admitted to the mails. With such power an administration would not require any special act of Congress giving it control of the press of the country.

SHOULD BE SUPPRESSED.

The press service which Chief Terence V. Powderly of the Division of Information of the Bureau of Immigration of the National Department of Commerce and Labor is cultivating vigorously puts out among its many glittering generalities that Mr. Powderly hopes to get the immigration law strengthened by Congress in several respects. About the most effective and most desirable change for Congress to make in the immigration law is a repeal of the section creating the Division of Information in the Bureau of Immigration at the National Department of Commerce and Labor as a step toward abolishing the department itself. In the two or three years of its existence the department has done more to demoralize the fundamentals of American commerce and American industry than any ten other influences. It has managed to fertilize quite freely the dangerous growth encouraging individuality to dwarf itself in dependence upon the General Government. Success of the plan apparent in the organization of Chief Powderly's division will make it impossible for individuality to assert itself against the tendency to centralize all power in the hands of the General Government. The plan looks to control of both labor and capital by the Government.

BEFOGGING IMMIGRATION.

If the proposed trip of the United States Immigration Commission to the South can be productive of no more valuable results than those which have been obtained from the commission's summer jaunt in Europe, judged by

cable reports, the question of immigration to this country will be more befogged than ever before.

ROUSING VIRGINIA.

Commodore Mathew F. Maury, probably the most gifted Southerner of his day and always to the front half a century ago in movements for the material advancement of the South, pointed out that "the James river and its tributaries alone afford water-power enough to line their banks from Covington and Lexington with a single row of factories all the way to Richmond." Referring to the statement, Mr. Charles M. Robinson, secretary of the recently organized Upper James River Valley League, writes to the *MANUFACTURERS' RECORD* as follows:

The natural resources of this valley are untouched forests of poplar, oak, hickory and pine, and other woods are abundant. Granite in the lower portion and limestone in the upper are inexhaustible. Slate and soapstone quarries are now being mined and the product shipped to England in competition with Scotch and Welsh slate. Coal is mined locally, and down the valley is hauled the products of the great Pocahontas field to tidewater.

The four varieties of ore used in iron manufacture—magnetite, specular ore, limonite and spathic ore—are all found here, and the first three in great abundance. Manganese ore, including the higher-grade oxides, and manganese iron ore occur particularly along the valley. The clays of the valley will make anything from common red brick to Chinese ware. Gold is found in well-paying quantities and is worked in a small way. Nowhere on earth has nature spread with a more lavish hand the natural resources of earth, air and sky.

The water is clear, good and soft and in abundance. The rainfall is generous, the country healthy (there is no malaria here), and the climate cannot be surpassed.

Flanking the valley are farms capable of feeding the vast army of workers should the golden dream come true, and we should see miles of factories with their whirling spindles, their spouting furnaces and the hum of industry.

As the Governor of Virginia pointed out recently in addressing the Upper James River Valley League, there is nothing known to the temperate zone which will not grow here. The farms are rich beyond compare, although they have been carelessly cultivated and held in too large estates. Three million acres of as fine land as ever the sun shone on invites the settler and the manufacturer to this valley. The markets of the world are at our door. Tidewater reaches to Richmond, the beginning of the valley, from whence water freight may be had to any seaport in the world.

It is proposed to include in the membership of the Upper James River Valley League every individual having a personal interest in that section of Virginia. The organization seems to have started with considerable vigor and upon right lines, and there should be no reason why its plans should not be carried to full fruition. Virginia has not realized upon its vast resources as it should have done, but a new spirit, manifested prominently in the liberal support given by the Legislature to the intelligent and zealous work of Hon. G. W. Kolner, State Commissioner of Agriculture and Immigration, in inducing thrifty settlers to come to Virginia, now prevails in many sections of the old Commonwealth, and properly cultivated and expanded through such bodies as the Upper James River Valley League, it must result in material benefits for the whole State.

Mr. W. E. Dunwoody, secretary and treasurer of the Standard Brick Co., Macon, Ga., writes to the *MANUFACTURERS' RECORD* as follows:

I have read numerous articles of yours on the railroad situation and cannot refrain from writing you congratulating you on same and expressing my feelings briefly on the subject. Neither the writer nor any of his company are in sympathy with the Leg-

islature that is adverse to railroad interests. We believe they have acted without the necessary understanding to know just what should be done, and we wish to do all in our power against this ill-advised and unjust action.

HAPHAZARD RAILROAD REGULATION.

The haphazard character of much of the legislation attempting to regulate the operations of the railroads of this country and the fevered haste of such legislation are indicated in a comparison of the maximum passenger rates per mile fixed by law in 27 States, and by the fact that 12 States have fixed the rates at two cents a mile within the past four years. The 12 States are Arkansas, Illinois, Indiana, Iowa, Minnesota, Mississippi, Missouri, Nebraska, Ohio, Pennsylvania, West Virginia and Wisconsin. Rates in other States are: Alabama 2½ cents; Georgia 2, on the Atlanta & West Point Railroad; 2¼ on the Atlantic Coast Line and the Georgia Railroad, 2½ on the Central of Georgia, Southern Railway, Seaboard Air Line, Georgia Southern & Florida and Alabama Great Southern and 3 on all other roads; Kansas 3, Louisiana 3, Maryland 3, with roads charging more than 2 cents issuing mileage books at 2 cents; Michigan, Lower Peninsula 2 and Upper Peninsula 3; Nevada 10, New Jersey 3, New York 3, except 2 cents on New York Central and 2-cent mileage book on all railroads; North Carolina 2¼, North Dakota 2½, with 2-cent mileage books on all railroads; Oregon 4, South Dakota 2½, Texas 3 and Virginia 2 on trunk lines, with 2½ to 3½ on other roads.

The complications concocted by such variations in legislation for the railroads selling tickets carrying passengers through several States are suggested by the rates which the Southern Railway would have to charge—2 cents in Virginia, 2¼ cents in North Carolina, 2½ cents in Georgia and Alabama and 2 cents in Mississippi.

Such complications, however, are as nothing compared with the injustice lurking in what may be called imitative legislation, by which the rate which may be perfectly reasonable for the railroads in one State is applied to railroads in another State, where it may spell ruin for the owners of the railroads and crippling of the progressive energies of the State. Many elements should be considered in fixing the rate, and not the least important is what may be called the density of traffic or of traffic potentiality. It costs very little more to haul a car filled with passengers a mile than to haul the same car empty the same distance. The investment in the undertaking is about the same, but it is obvious that the car hauling six persons one mile returns much less upon the investment than the car hauling 60 persons. Fixing the passenger rate per mile the same for both cars, and fixing that rate upon the basis of the business done by the full car would be to the disadvantage, if not to the wrecking, of the comparatively empty car. But that seems to be about the only principle underlying the prevailing legislative frenzy against the railroads. A comparison of the conditions entering into the question of density of traffic potentiality is made in the following table—figures of 1905—of four States in different parts of the country, in each of which the 2-cents-a-mile rate has been fixed by law:

States.	Population.	Sq. miles land area.	Railroad mileage.
Pennsylvania.	6,824,115	44,985	11,151
W. Virginia.	1,056,805	24,645	2,956
Ohio.	4,400,155	40,760	9,243
Arkansas.	1,403,239	53,045	4,165

Granted that the 2-cents-a-mile rate is a fair one for the railroad in Ohio, which has one mile of railroad for about every 4.3 square miles of its area, and in a population of 107 to the square mile has 476 possible passengers for every mile of railroad, what profit can there be in the same rate for the railroads in Arkansas, which has only one mile of railroad for every 12.9 square miles of its area, and in a population of 26 to the square mile can offer not more than 336 possible passengers for every mile of railroad?

Coming to the point from another direction, if West Virginia, with but one mile of railroad for every eight square miles of its area, and in a population of 43 to the square mile has only 356 citizens for every mile of railroad, can fairly fix its railroad passenger rate at 2 cents a mile, are not the railroads of Pennsylvania earning too much at the same rate of fare when it has one mile of railroad for every four square miles of area, and in a population of 151 to the square mile it has 611 potential passengers for every mile of railroad? Yet the railroads in Pennsylvania are testing the justice of the 2-cents a mile rate. What of the justice of the same rate in West Virginia?

When, too, full weight is given to the large contributions through interstate commerce to the railroads operating in Pennsylvania and Ohio in comparison with similar contributions to the railroads operating in West Virginia and Arkansas, and the relation of such earnings to the earnings based upon traffic originating within and confined to the respective States, emphasis is likely to be made of the danger to a State in basing legislation largely upon hysteria and imitation.

Extending the thought into the field of freight rates, a general indication of freight traffic potentialities in the four States under consideration is given in the following table showing the annual value of manufactures, agricultural products and minerals, the figures for the first two items being as of the year 1900 and for the third as of 1902:

	Value of States manufactures.	Value of farm products.	Value of minerals.
Pa.	\$1,834,790,860	\$207,895,690	\$236,871,417
W. Va.	74,838,330	44,768,979	48,378,414
Ohio.	832,438,113	257,065,826	57,186,922
Ark.	45,197,731	79,649,490	2,840,341

Absolute accuracy in the basis of comparison can be approached only in knowledge of the tonnage of the three classes of products in the same year, but it is enough for the purpose to know that, calculating loosely, for every mile of railroad the production of potential freight expressed in the value of manufactured agricultural and mineral products annually is \$204,000 in Pennsylvania, \$57,000 in West Virginia, \$124,000 in Ohio and \$30,000 in Arkansas. In reality the difference in volume of traffic in favor of Pennsylvania and Ohio is many times greater than these figures would indicate. Dealing only with freight originating within the respective States, it is clear that a freight rate equitable for the railroads of Pennsylvania and Ohio would hardly be fair for the railroads of West Virginia and Arkansas.

But of what value would the mineral and timber and agricultural resources of any of these States be were it not for the railroads? How would Pennsylvania rank today as a manufacturer were it not for the 12,000 miles of steel rails traversing it and the energies put forth by the managements of the railroads to build up traffic-making industries? What would the South be today without its railroads? The answer is revealed in the fact that while in 1880,

with but 21,000 miles, the South was producing only \$457,000,000 in manufactures and \$660,000,000 in agriculture, was exporting but \$265,000,000 worth of merchandise through its ports and had property valued only at \$7,505,000,000, in 1907, with 65,000 miles of railroad, it is producing \$2,500,000,000 in manufactures, \$2,000,000,000 in agriculture, is sending \$734,000,000 worth of goods through its ports to foreign lands, an amount less than the total contributions of the South to the American export trade, and has property valued at more than \$20,000,000,000.

Will the South, by discouraging through Incontinent legislation the building of railroads to the point where the railroad mileage, now standing at about one mile for about every 12 square miles of its area, will more nearly correspond to the mileage in relation to the area of the railroads in such progressive and flourishing States as Massachusetts, New York, Pennsylvania and Ohio—one mile of railroad for every four or five miles of territory—bring itself to a standstill, if not to the verge of retrogression?

FOR A REACTION.

It is not easy to understand how there could be enough crazy men in the Alabama Legislature to pass a law forfeiting the permit of a foreign corporation doing business in the State if it had a case removed from a State to a Federal court. The Southern Railway traverses several States. It is an interstate carrier. When it has a case taken from a State to a Federal court it is exercising only its legal right, it is committing no crime, and it is doing no one any harm. Yet for exercising its legal right it stands today virtually outlawed by the State of Alabama. The effect of such unreasoning hostility to the railroads is bound to affect the efficiency of a road and to make it shy about building extensions, and, of course, anything that retards or impairs transportation is certain to check commerce and industry. In short, the Alabama law will do incalculable harm to Alabama and check the growth of that State. If the South wishes to keep up her progress, she had better refrain from paralyzing her railroads.—*Memphis Commercial Appeal.*

What cares the average politician who makes these laws for the rights of property or the progress of the South? What counts the Constitution with demagoguery? These be serious times. Nobody need imagine that all of the present conditions are but a passing whim which will soon be over. Unless the whole country be aroused to the dangers of the present situation there are stormy times ahead.

Commenting on this condition, the *Charlotte Observer* says:

But t'ell with vested rights. Here was an opportunity, afforded by an idiotic statute, to make trouble and take vengeance, and there was no delay in seizing it.

But the inevitable result of prosecution born of a spirit of persecution is reaction of public sentiment, which in this case is likely to be seen in favor of the Southern Railway, extending even to matters about which it is clearly wrong.

In the absence, we believe, of its senior editor, our friend, the *Coal Trade Journal* of New York city, says:

The cutting down of the dividends on Southern Railway shares must be the result of some of the great prosperity of which the MANUFACTURERS' RECORD has been telling of so much.

And the moral is that children ought not to be permitted to play with edged tools.

"REFORM" BY MISINFORMATION.

It is reported in the *Baltimore News* that there will be an attempt to make stricter the "child-labor" law of Maryland. A headline of the item containing that information reads, "Twenty-three Thousand Children Between Twelve and

Sixteen Years Work in Factories of Maryland." The very body of the item indicates how misleading that statement is. It is a specimen, however, of the misinformation upon which not merely the "child-labor" legislation of Maryland, but also that in most parts of the country, has been furthered.

THE TIMBER SUPPLY.

The railroad and mining companies are among the greatest consumers of timber in the country, and railroad and mining companies are leading in the movement of tree-planting to insure a steady supply of wood for themselves. A pioneer in this respect is Mr. John D. Atkinson of Earlington, Ky., president of the St. Bernard Mining Co., which, according to *Arboriculture*, has planted within the past 20 years more than 1,000,000 black walnuts and during the past two years 75,000 catalpas and 75,000 locusts. In 1900 several thousand tulip trees were planted on lands owned by the company, and the company now has 20,000 young tulips ready to set out. The company plants annually between 150 and 250 bushels of black walnuts on vacant places in its forests or cleared lands in Hopkins county, Kentucky. This practice indicates not only the faith of the company in the future productivity of its coal mine, which naturally has its limitations, but also its practical appreciation of the fact that the forests of the country are not inexhaustible, but that intelligent dealing with them may prolong their life indefinitely.

In this connection it is interesting to note the probability that the forest service of the National Department of Agriculture will probably make a comprehensive investigation of the possibilities of worn-out lands in the South for the growing of timber crops, it being recognized that the growing of forest trees will not only bring valuable returns, but will improve and restore the soil.

THE COTTON YEAR.

During the cotton year ended August 31 the mills of this country took 5,132,880 bales, an increase over the preceding year of 380,467 bales, and there were exported 8,364,478 bales, an increase of 1,777,497 bales. Northern and Canadian mills took 2,638,311 bales, an increase of 202,320, and Southern mills took 2,494,569 bales, an increase of 178,147. These figures are taken from the report of Col. William F. King, superintendent of the New York Cotton Exchange, who, in commenting upon them, says:

"Had the supply of labor proven sufficient the absorption by Southern mills would have increased the splendid industrial exhibition shown by them this year. In the face of adverse, and in many instances new, conditions, the manufacturers of the South have pressed steadily forward in the upbuilding of a great industry. * * * There has recently sprung up in the South a large number of mattress manufacturers, upholsterers, etc., who are using lint cotton in increasing amounts. It has been difficult to obtain from a number of these newly-organized plants a statement showing their takings of linters. Perhaps the necessity for such statement is not as yet clearly understood by them."

ARTISTIC ADVERTISING.

When the railroads of the South shall have surcease from the struggle for existence and be in a position to resume their active work for the upbuilding of the South they will find suggestions for advancing their plans in a brochure, "The Road of a Thousand Wonders," issued by the passenger department of the Southern Pacific Company. The volume of 70-odd pages descriptive of the Coast Line-Shasta Route of the Southern Pacific Company from Los Angeles through San Francisco

to Portland, a distance of more than 1300 miles, is thoroughly typical of the work which the Southern Pacific has done for years, and done successfully, in attracting to the Pacific coast. The text, though full of facts, reads like a romance, and it is profusely illustrated with half-tone pictures in color of the vast range of scenery along the route. The illustrations are exquisite pieces of color work, conveying impressions that can be had in no other way save by actual seeing. It is possible for the publication to be surpassed with Southern views as its material, but it has not yet even been approached in the South or anywhere else in the country.

IN KENTUCKY COAL FIELDS.

Louisville & Nashville Railroad Building Toward New Developments.

[Special Cor. Manufacturers' Record.]
Middlesboro, Ky., August 30.

The Louisville & Nashville Railroad Co. is not losing any time in putting into execution the plans formed last year for improvements on the Cumberland Valley division. This division extends from Corbin, Ky., to Norton, Va., a distance of 118 miles. The improvements now being made are largely on the north end between Corbin and Middlesboro.

Contracts have just been let for grading the new storage yards of the Louisville & Nashville between Wallsend and Four Mile, the tracks beginning just north of the city limits of Pineville and extending about two miles northwardly. There will be six storage tracks.

The contract has been let also for the mine tracks of the Left Fork Coal Co., main office Pineville, Ky. These tracks are to reach a territory of the famous Straight Creek coal, which has recently been acquired by Harvey Ingles of Middlesboro, Ky.; C. E. Metcalf of Pineville, Ky., and John S. Van Winkle of Danville, Ky. Contractor M. S. Callison of Middlesboro has been awarded both contracts, and now has a force on the Straight Creek work.

The Straight Creek Coal Mining Co., Cary, Ky., which has been operating on the Left Fork of Straight Creek for a few years, has recently made a change in the management of its plant, Mr. W. L. Burchfield selling his interest and resigning as general manager. Mr. White L. Mass of Pineville, Ky., has succeeded Mr. Burchfield.

The Coleman Mining Co., Blanche, Ky., which also operates on the Left Fork of Straight Creek, has made a wonderful success with its Fox Ridge coal, which is the finest of the Straight Creek seams.

The Big Hill Coal Co., Blanche, Ky., which mines above the Coleman people, is rapidly forging to the front, and has attained a good output after overcoming some obstacles.

The development of the Left Fork coal fields has just begun, there being only four operations on the creek, and all of them installed since the railroad was built three years ago. Louisville capitalists have recently purchased a tract of 4000 acres at \$30 per acre, and Birmingham people are figuring now on a similar tract. Many bodies of coal adjacent to railroad are still available, but in smaller size than the above.

At Four Mile, beyond Pineville, there is considerable activity evinced by the coal companies. The Black Bear Coal Co., Edward Blake, lessee, is increasing its equipment, and the Highland Run Coal Co., just below, is preparing to build a new tippie and load all its coal from one tippie instead of from two, as at present. The screening arrangement will comprise fine loading tracks, and will be so arranged that different grades of coal from the different mines will be kept separate. A picking

table is also contemplated, which is the first move in this direction in the Southeast Kentucky fields.

The Black Raven Coal Co., Four Mile, Ky., recently changed hands at a large sum, said to be \$200,000, and this operation will rapidly increase its output. Already one of the best-equipped plants in the State, the new owners, who are Chattanooga capitalists, will make it even better. It is equipped with electric haulage, hoist and fan, and has all the necessary machinery for a plant of its large dimensions.

JOHN HOWARD.

TO BUILD COKE OVENS.

Coal Development Near Richwood to Be Pushed.

[Special Cor. Manufacturers' Record.]
Richwood, W. Va., August 30.

The development of coal in this section, discouraged heretofore by the Baltimore & Ohio Railroad, which seemed to desire to keep it back until the timber had been worked out, is about to begin. The Laurel Manufacturing Co., which has a big mill at Fenwick, some two and a half miles down Cherry river from this place, will be the pioneer in the business, and it cannot be long before its lead is followed by others until this section becomes one of the leaders in coal production in the State. Two miles up Laurel creek, which flows into Cherry river at Fenwick, a four-foot seam of coal has been opened up. Driven well under cover the coal shows clean, and analysis and practical experiments show it to be a coking coal of very high grade. There is little doubt that it is the genuine New River seam, which has given Fayette county such a high position in coal production. The Laurel Company will at once build 100 coke ovens, the intention being to engage exclusively in the manufacture of coke. If the coal shows up as well when driven back into the hill as it does as far as driven now other ovens will be added until a very large production will be accomplished. The seam to be operated lies well above water, and the work will be done by drift. A standard-gauge railroad will be built from the Baltimore & Ohio at Fenwick to the mines, the grade being sufficient to bring loaded cars from the mines to the main line by gravity.

Mr. E. F. Saxman of Philadelphia, one of the best coal and coke men in the country, was at Fenwick the first of the week and make an examination of the site for the proposed plant, which he approved.

It is felt that the installation of other plants for mining coal and manufacturing coke will rapidly follow the establishment of this one, and that long before the supply of timber is exhausted lumber will have to fight with coal for the right of way in the matter of importance as an industry. The Cherry River Boom & Lumber Co., which owns 150,000 acres of land in this vicinity, has opened several mines for its own use, and its managers have long contended that the coal found was the genuine New River seam. If this coal proves to be of the quality claimed, and is found to lie in seams of equal thickness with those in the New River field, it will mean that this is to become just such another hive of industry as that in the New River gorge, and that the State's production of coal will be very largely augmented before the lapse of many years.

GEO. BYRNE.

Industries for Charleston.

[Special Cor. Manufacturers' Record.]
Charleston, W. Va., September 2.

The Charleston Chamber of Commerce at its recent monthly meeting decided by unanimous vote to erect a building at the corner of Quarrier and Dunbar streets, on the property recently acquired by the Meyers Company. The structure will be 50x125 feet in area and five stories high.

It will be handsomely finished and furnished with all the conveniences and appliances that go with a twentieth-century office building. The first story will be given over to storerooms, and the rest of the building will be divided into offices, with the exception of a large assembly room that will be fitted up for the meeting place of the Chamber of Commerce. This body of business men has accomplished a great deal for this city in the last five years, and this new move is an earnest of the faith of its members in the continued progress and prosperity of Charleston.

The people of this city are just now giving a good deal of thought to the acquirement of small manufacturing plants. Taking Atlanta, Ga., as an example, they have determined that the best results are to be accomplished by securing many small rather than a few large ones. A number of small factories already doing business here have proved so successful that they have but whetted the appetite for more. Several years ago the wholesale dry goods firm of Abney Barnes Company established a factory for the purpose of making overalls for its own trade. It proved successful from the start, and has been enlarged and increased from time to time until now it has several times the capacity it had at the start. Mr. I. Schwabe, who for many years was engaged in the clothing business here, two or three years ago retired from the firm of which he was so long a member and established an exclusively wholesale clothing house. This led him into an investigation of the manufacture of clothing and the purchase of a controlling interest in a manufacturing house in New York. After a while he decided that the manufacturing business could be carried on to better advantage here than in New York, and so it was moved here. The company now employs 75 people, and is actually sending clothing manufactured here to the city of New York. Two candy factories, of considerable size for that business, have long pursued profitable careers here. These factories and others of like character, small in comparison to other plants in the city, and about to be installed here, have vindicated the small-plant idea, and the men who do things for Charleston have determined to pay more attention to acquiring more of the same kind.

GEO. BYRNE.

LOUISIANA DRAINAGE.

Movement for a Reclamation of Millions of Acres of Swamps.

[Special Cor. Manufacturers' Record.]
New Orleans, La., August 30.

A big drainage convention that will in all probability be attended by representatives of all the swamp-land holders in the State of Louisiana will be held in this city September 12. Its main object will be to finally determine whether or not the recently-organized State Drainage Association shall become affiliated with the National Drainage Association or operate as an independent State body. Opinion is somewhat divided on the outcome of the meeting, but it is generally believed that the convention will vote to co-operate with the National Association in the big work it has undertaken. Since its organization some months ago the Louisiana auxiliary has done comparatively little work, though it has revived interest in the matter of reclaiming swamp lands. This topic is now becoming a very live one all over the State, and in many sections steps toward reclamation work are being undertaken. In many parishes and sections owners of swamp lands have shown what can be done in the way of reclaiming these lands, and this refers in a large measure to the results attained by the New Orleans Land Co., which recently reclaimed 2500 acres in a part of this city. This company for

years has owned a large tract of swamp land lying north of Canal street, between what is known as the New Basin Canal, Bayou St. John, the rear of the Greenwood Cemetery and City Park and the shore of Lake Pontchartrain. Some time ago the land company set about draining this land. This was accomplished, and now a large part of it lying adjacent to the tracks of the West End line of the New Orleans Railway & Light Co. has been filled in and laid off in streets. It is being developed into a residential section. Beautiful, even shell roads run through the big tract, and when completed it will be one of the most attractive spots in New Orleans. Three or four years ago it was nothing other than a low, undrained swamp, the home of myriads of mosquitoes and thousands of water snakes and other reptiles and insects.

There are in Louisiana just about 7,000,000 acres of these lands in need of reclamation. All of this is held by men or corporations who have bought it from the State of Louisiana and the National Government. No more of this land is State or Government land, and for that reason there is said to be nothing in the way of a concerted movement toward reclaiming the major part of this land. Edward N. Wisner, member of the firm of Wisner & Dresser, which controls a great many thousand acres of this swamp land, in talking today of the coming convention and its probable result, said that it had already been established that this land could be reclaimed for \$15 an acre. His firm has operated extensively in Lafourche, St. Charles, St. Bernard and Jefferson parishes, and has also done a good deal of work in the vicinity of New Iberia. Many acres of this reclaimed land have been sold to truck farmers and have been planted in corn, sugar-cane and trucking. It makes admirable farming land, and the reclaiming of this land means a remarkable development in the agricultural resources of the State.

A \$50,000 Glass-Bottle Plant.

The J. C. Madden & Sons Company of Sapulpa, I. T., has been incorporated to manufacture flint-glass bottles, daily capacity to be 425 gross. Plans are being prepared for erection of buildings as follows: Brick office, 30x50 feet; frame storehouse, 38.5x150 feet; 50x150-foot frame box factory; 80x150-foot warehouse; 80x100-foot frame enameling-house; corrugated iron 80x125-foot main factory. These buildings will cost about \$20,000, and their equipment of machinery will cost about \$30,000. Officers of the company are J. C. Madden, Sr., president; Wm. C. Schmidt, vice-president, and J. C. Madden, Jr., secretary-treasurer. Manufacturers of and dealers in lumber, corrugated iron and roofing are advised that the company has not purchased in their lines.

To Establish Automobile Plant.

Mr. H. A. Williams of Akron, Ohio, proposes to establish the Herculean Motor Car Co. and automobile manufacturing plant in the South. He is prepared to receive suggestions as to a location and information regarding the advantages offered by locations suggested.

The executive committee of the Interstate Cottonseed Crushers' Association has determined upon a meeting of the association this month to consider some plan to improve the handling by transportation lines of cottonseed products.

Ten counties of Mississippi show assessments of real and personal property this year greater by more than \$1,000,000 than last year, and it is expected that the total increase in the State will be more than \$10,000,000.

FROM INDIAN TERRITORY TO THE GULF.

Completion of an Oil Pipe Line More Than 400 Miles Long.

[Special Correspondence Manufacturers' Record.]

Beaumont, Texas, August 31.

The last joint of pipe on the Gulf Pipe Line Co.'s eight-inch trunk line from the Glenn pool, Indian Territory, to Sour Lake, Texas, a distance of 415 miles, was screwed into place at a point north of Red river on August 13, marking the completion of the first pipe line from the Indian Territory oil fields to the Gulf coast. The work of pipe laying was started on this line on February 13. It required exactly six months to complete it—a feat in pipe-line construction that will go down in history. It is estimated that the cost of the line and all accessories will be \$5,000,000, exclusive of the field tankage at the northern end. The Gulf Pipe Line and affiliated companies have over 2,000,000 barrels of oil in steel storage in the Glenn pool, representing an additional investment of over \$1,350,000. All told, the Gulf Pipe Line interests will have expended more than \$7,000,000 before the expiration of a year from the date that the preliminary details were undertaken last October.

The Gulf coast region of Texas and Louisiana has not developed a new oil pool of importance since the Humble field was opened up in January, 1905. A record-breaking production was obtained in that year, due to the prolific output of the Humble and Jennings wells. Coincident with the decrease in Gulf coast production there was developed in Indian Territory, at a point about 14 miles south of Tulsa, in the Creek Nation, a pool of light oil which gave indications of being very rich. Subsequent developments have justified the most sanguine expectations as to this new field. The Glenn pool—so named because the discovery well was drilled on a farm owned by Ida E. Glenn—in less than a year has produced over 15,000,000 barrels of crude petroleum especially desirable for the purposes of refining. More than 700 wells have been completed in this field, many of them having developed a capacity of 1000 to 1500 barrels a day. The proven area has been extended over 9000 acres, and the limits of the pool have not yet been defined. For months past the daily production has exceeded 75,000 barrels, and if facilities could have been provided to handle the full capacity of the wells it might just as easily have been 100,000 to 120,000 barrels a day.

The companies having large investments in refineries in Southeast Texas were confronted with a somewhat serious proposition when the production of oil in the Gulf coast region began to fail. Their requirements amounted to 20,000 to 25,000 barrels a day, and stocks were being drawn upon to the extent of 30,000 barrels a day or more. It was inevitable that they should look to the Indian Territory in making plans for their future supply. The excellent quality of the Territory crude for refining purposes, as compared with Gulf coast oil, which is heavy and better adapted to fuel use than for refining, was a further attraction. With an adequate supply of Indian Territory oil the Southeast Texas refiners figured that they would be upon an equal basis, with their Eastern competitors, who were and are now getting a large part of their supply of crude from the Territory.

The distance as the crow flies from the Glenn pool to the Gulf coast is less than 450 miles. The construction of an eight-inch pipe line to bridge the distance between the source of supply and the refineries in Southeast Texas involved an

expenditure of some \$5,000,000, exclusive of tankage facilities and other extras in the field, but the interests in control of two of the Gulf coast refineries decided to undertake the construction of eight-inch pipe lines without delay.

The actual work of laying the first of these lines was completed on August 13, when the Gulf Pipe Line Co. closed the last gap in its trunk line north of Red river, in Indian Territory. The first joint of pipe, marking the inauguration of construction on this line, was laid at Sour Lake, Texas, the southern terminus, on February 13. To complete the work in six months it was necessary to lay 12,000 feet, or over two miles, of pipe a day. As many as 1500 men were engaged on the work at one time, and much difficulty was experienced in securing labor that could stand the fierce heat of the midsummer sun. The problem of providing the workmen with suitable quarters, food and water was also a big one.

All details were figured out and all construction was done under the direction of C. H. Markham, second vice-president and general manager of the Gulf Pipe Line Co., who had active charge of the project. John F. Fisher, general superintendent, and C. F. Moore, assistant general superintendent, were in the field. That Mr. Markham and his assistants got results is clearly shown by the rapidity with which the work was completed. It makes a record in pipe-line construction in the Southwest, if not in the entire country.

Glenn crude was pumped into the trunk line and started southward from the northern end in the Glenn field on August 15. With the completion of work on certain of the pumping stations this month the oil will be forced through to the storage tanks and Gulf refinery at Port Arthur. The delivery of Glenn crude through this line to the Gulf coast will mark a new epoch in the oil industry. The Gulf Pipe Line is the longest and largest trunk line ever laid by an independent company. By means of it the Gulf Refining Co., operating the largest independent refinery in the United States, will receive a supply of high-grade crude, from which all the products of petroleum will be manufactured and distributed to the markets of the world. The Gulf refinery has a capacity of 15,000 barrels a day running on heavy crude, which means that its capacity on the less refractory oil from the Glenn pool will be considerably greater. The interests which control both the Gulf Pipe Line and the Gulf refinery—the Mellons of Pittsburg, Pa.—have their own line of modern tank steamers and barges plying between the refinery at Port Arthur and Atlantic coast points. Stations for the distribution of the Gulf Refining Co.'s products have been established at important points on the Atlantic seaboard, including Tampa, Fla.; New Orleans, La.; New York city, Boston and Philadelphia. In addition the company has distributing stations at inland points throughout the South, over 40 being located in Texas alone. Shipments are made direct from the Gulf refinery docks to England and continental ports.

The importance of the Southeast Texas refining industry is greatly increased, now that a plentiful supply of high-grade crude oil has been assured. The facilities for the shipment of refined products from Port Arthur are unsurpassed. From this point the world's petroleum markets are accessible, and with the completion of the Pan-

ama Canal the Texas refineries will have a vast advantage over those on the eastern seaboard in a shorter haul to many important points of consumption.

Details of the Gulf Pipe Line Co.'s trunk line are given as follows: Diameter, 8 inches; length in Indian Territory 150 miles, in Texas 265 miles—total 415 miles; pumping stations, six, located, respectively, at the Glenn field; at Chambers near South McAlester; at Lenoir, in Lamar county, Texas; at Big Sandy, in Upshur county, Texas; at Lufkin, in Angelina county, Texas, and at Sour Lake, where connection is made with the Gulf Company's existing pipe-line system, leading to the Gulf refinery and docks at Port Arthur, a distance of 35 miles. Including the division between Sour Lake and Port Arthur, the line is 450 miles in length. It will require 125,000 barrels of oil to fill it. Three of the pumping stations on the line in Texas, namely, Lenoir, Big Sandy and Lufkin, are being equipped with Hornsby-Akroyd crude-oil engines, generating their power direct from crude oil. Four of these engines, each of 75 horse-power, will be installed at each of the three stations. At Watkins station (Glenn pool) tubular boilers fired with natural gas furnish the power. Tubular boilers are also used at Chambers, where coal is the fuel. The proximity of the McAlester coal fields makes it economical to burn coal at this station. The pumps to be used on the line are Gould triplex power, direct connected, four of 5000 barrels capacity to be located at each station excepting Chambers, where there will be three Epping-Carpenter triple-expansion direct-connected pumps, each of 7500 barrels capacity. A working pressure of 600 to 700 pounds to the square inch will be maintained on the line. The station at Watkins is now in operation, and those at Chambers and Big Sandy are practically ready. Lenoir and Lufkin will be in condition to pump oil, according to present plans, by November 1. The management expects to run 8000 to 9000 barrels a day through the line pending the completion of the Lenoir and Lufkin stations. With these in operation the capacity will be increased to 12,000 or 14,000 barrels a day. Two 37,500-barrel steel storage tanks have been erected at each of the pumping stations. Pending the completion and operation of its pipe line the Gulf Company has been shipping 3000 barrels a day of Glenn crude by tank car to its refinery at Port Arthur.

Both telegraph and telephone lines have been constructed on the pipe line right of way from the Glenn pool to the general offices of the Gulf Pipe Line Co. at Beaumont and the refinery at Port Arthur. These lines also extend from the field north to the Gulf Company's offices in Tulsa. They will shortly be ready for use, thus establishing a double means of quick communication between the northern and southern ends of the line.

The Texas Company of Beaumont has completed its eight-inch pipe line from a point two miles south of Tulsa, I. T., to its station at West Dallas, Texas, a distance of 270 miles. On August 24 this company posted its first interstate pipeline tariff, making the rate for the transportation of crude petroleum from the Glenn pool to West Dallas 25 cents a barrel. The same rate is announced from the Glenn pool, I. T., to Eleanor, Texas, nine miles south of Dallas, where the pipe line crosses the Santa Fe Railroad, and where a loading rack has been built for the shipment of oil delivered through the pipe line from Indian Territory. A copy of the tariff has been filed with the Interstate Commerce Commission, in compliance with the provisions of the law enacted by the last Congress. This law extends the jurisdiction of the Interstate

Commerce Commission to pipe lines as common carriers. The new tariff goes into effect tomorrow. Under the regulations of the Texas Company, as published in the circular, it agrees to receive and deliver crude oil for interstate transportation only through its own facilities; it requires the parties offering oil for transportation to make separate pipeage contracts for such shipments a reasonable time before the duty of transportation arises; it will receive oil subject to the right and the consequences of mixing it with the common stock only, and no oil testing less than 30 degrees gravity Beaume scale will be received; it will provide storage incident to and during transportation only, the shipper being required to provide facilities for receiving the oil at destination; the right to require prepayment or acceptable security for charges is reserved, also satisfactory assurance that the oil is free from liens and charges and that the shipper has the right to direct its disposition. No limitations are prescribed at this time as to quantities, but reasonable limits will be required by the terms of pipeage contracts, and in the event of tenders in excess of capacities, including outstanding pipeage obligations, the right to reasonably allot and apportion is reserved by the Texas Company, and tender for transportation shall not be good for quantities in excess of such as is already in or available for immediate delivery into the Texas Company's pipe lines at the time of such tender. Patrons are permitted to use, without extra charge, the company's private telegraph lines for messages incident to the business, subject to delays and interruptions, and without liability to the company. All crude petroleum transported under this tariff is subject to further charges for gathering preliminary to receiving the same into the existing schedule of such charges, which are subject to change and which at present are as follows:

Where the distance is 15 miles or more, 20 cents a barrel.

Where the distance is less than 15 miles but more than 10 miles, 15 cents a barrel.

Where the distance is less than 10 miles, 12½ cents a barrel.

The transportation charge includes delivery into cars furnished by shipper or into shipper's storage at destination. If other delivery is desired special arrangements must be made, covering additional charge proportionate to the service rendered, in no case to be less than two and one-half cents a barrel.

This tariff being the first filed by any of the pipe lines operating in the Southwest, in compliance with the new law, it is especially interesting to oil men throughout the country. Inasmuch as the provision putting pipe lines under the authority of the Interstate Commerce Commission has only recently gone into effect, the matter remains to be worked out in practice. The supervision of pipe lines by the commission is in a somewhat experimental stage. Neither the commission nor the pipe-line companies know just "where they are at." So far as is known, no oil has been offered to any of the pipe lines in the Southwest for transportation in their capacity as common carriers; in fact, only one line has done an interstate business up to this time—the Prairie Oil & Gas Co. This company has not filed tariffs.

The Texas Company's trunk line from Tulsa to Texas will join the existing pipe-line system of the company at Humble when completed. The distance from Tulsa to Humble by way of Dallas and Corsicana—which is the route taken by the Texas Company's line—is 470 miles. There will be nine pumping stations on

the new line, distributed at intervals of about 50 miles. Six of these on the line between Tulsa and Dallas are completed. They are located at Tulsa (Clinton farm), Henryetta, Stuart and Armstrong, I. T., and at Sherman and West Dallas, Texas. At West Dallas the Texas Company has a 270-acre farm on which it is completing steel storage with a capacity of 450,000 barrels, and a separating plant, or refinery, where Glenn crude will be treated so as to take off the heavy portions, composing an excellent fuel oil for which there is a ready market at Dallas and in the contingent territory. A station will also be located at Corsicana, another about 60 miles south of Corsicana, and the last one on the main line at Bobbin, in Montgomery county.

From Humble to Port Arthur the distance is about 90 miles. The Texas Company now has a station at Humble, another at Sour Lake, 50 miles east of Humble, and another at Garrison, south of

Beaumont and opposite Spindletop. It is expected that Glenn crude will be running through to Port Arthur by January 1. The Texas Company operates two refineries in Southeast Texas, one at Port Neches, on the Neches river, between Beaumont and Port Arthur, and the other at Port Arthur. The Port Neches plant is devoted largely to the manufacture of asphalt products from the heavy crudes of the Gulf coast region. It is probable that the Glenn crude delivered through the pipe line from Tulsa will be run at the Port Arthur refinery, where illuminating oil and gasoline are manufactured.

The Texas Company has been storing Glenn crude on the field and along its line since early in the year, and now has about 1,500,000 barrels on hand. It is shipping Glenn oil by tank car to its refinery at Port Arthur, and will shortly begin tank-car shipments from Eleanor, the present terminus of the line, to Port Arthur.

HOLLAND S. REAVIS.

Southern Railroad Displays at Jamestown Exposition

[Special Correspondence Manufacturers' Record.]

Jamestown Exposition,

Norfolk, Va., August 31.

The railroads of the South have, through their individual and collective efforts, been largely instrumental in making possible the present great development of that section, and these same railroads are showing at the Jamestown Exposition by their splendid array of exhibits the representative resources of the South in the developed and undeveloped territories tributary to their lines. Some of the Southern States are not represented here by their own exhibits, so that through no other exhibits can visitors get an adequate idea of the possibilities and opportunities in such States than through those made by the railroads. Those having space here are the Southern Railway, Atlantic Coast Line, Seaboard Air Line, Norfolk & Western Railway, Chesapeake & Ohio Railroad and Norfolk & Southern Railway, and when one considers the vast amount of territory which they cover, including every Southern State with the exception of Texas, some idea can be formed of the magnificent field they had to draw from in assembling representative exhibits. That the opportunity offered to show in a broad and general way these resources was taken advantage of is reflected in their exhibits, which undoubtedly are the best here, not only from the excellent and exhaustive manner in which they have been assembled, but likewise from the results which are daily being accomplished in interesting visitors in the varied opportunities which the South contains in such an abundance. It is true that these exhibits are placed here by each railroad company for the specific purpose of building up those sections adjacent to its own lines, and it is a business proposition with them, but as they penetrate practically all sections of the South, it is indeed a broad and beneficial undertaking, because every settler, industry or investor secured means a multiple of dollars to the South for every one to the railroads.

The exhibits are in direct charge of the industrial, immigration and agricultural departments of the roads, and connected with each exhibit are representatives who have made a close study of the resources and opportunities along their lines and are capable in every way to impress visitors in a clear and convincing manner with what the South has to offer them in the way of improving their present conditions. In nearly every case representatives of these departments went out along the lines of their roads previous to the opening of the exposition and gathered together sam-

ples and specimens of both raw materials and finished products to place in their exhibits. They conducted meetings and organized counties into working committees for the purpose of assembling exhibits of their distinctive products and the gathering together of facts and figures for booklets to be distributed in connection with the exhibits, and then brought all these to the exposition. All of this work and the large amount of space rented, the construction of booths and the arranging, classifying and taking care of the exhibits involved a considerable expense, all of which was borne entirely by the railroads themselves.

Men in every walk of life will find something in these exhibits which will interest them. They will appeal to the farmer by the wide variety of agricultural and horticultural products shown, with grain growing taller and with heads fuller of seeds than he has ever been accustomed to see, and a line of fruit and vegetables of the finest quality, greater variety and grown in quantities per acre of which he had never dreamed, and so in all other farm products, which grow easier, better and bring better returns than in any other section of the country. They will appeal to the manufacturer, who will see products of every kind turned out just as good as in any other parts of the country and more economically by reason of the South's many available raw materials and its cheap water-power facilities. They will appeal to the investor, who will see products of the mine, of the fields and of the woods which will fairly astound him as to the great and varied field of opportunities lying ready for development and promising splendid returns for capital invested. And finally they will appeal to the homeseeker, who will see here possibilities which will assure him at a comparatively small outlay a competence and good living that no other part of the country can surpass and few can equal in any of its branches; where the sun shines brighter, where no cold or rigorous winters prevent continuous outdoor work, and where man and nature seem best to thrive in the mutual determination to give to the world the best that is in them.

This is the kind of work which the railroads are doing at the Jamestown Exposition for the South, and the continued hammering home of the cold facts of Southern opportunities and Southern progress upon the visitors to their booths, and they are numerous, means results of the kind that are wholesome, effective and lasting.

Perhaps one of the strongest lessons suggested by these exhibits and the work of the railroads is that the South needs them and their energetic efforts to build it up; that the railroads need the South, with its vast opportunities for broadening their lines, and that by working shoulder to shoulder in a common cause, with a full and proper respect for the right of each, together with mutual encouragement, advances will be made with greater rapidity and with greater results. But let the opposite course be pursued, and the greatest sufferer will be not the railroads, but the South itself.

The scope of the railroad exhibits is so wide and so varied that some idea of what each has can best be appreciated by a brief outline of the principal samples and specimens as shown in their individual booths. The exhibit of the Southern Railway represents the resources of 11 States. Its principal exhibit, which is in the States Exhibit Building, occupies a double space and is made up of stone, mineral, timber, agricultural and horticultural products. Flanking the main exhibit are large columns, showing the hardwoods of the South in inlaid floor work, each side of the column showing a different pattern, while in the rear of the booth are shown from 40 to 50 samples of various commercial woods in their natural state, together with a number of the products manufactured from them. In front of the exhibit are two long marble counters, made from samples of marble from 12 different quarries in Tennessee, while on them are placed cubes of all kinds of building stones from many States. Placed on the center of the marble tables are cases containing specimens of kaolin, fire and other clays, mica, corundum, monazite, ochre, barytes, tin, gold, zinc, silver, copper and lead ores and coal of the South, all appropriately labeled and located. The horticultural display consists of the various fruits and vegetables of the South in jars, and tables containing varieties of apples from several States. Agriculture is represented by an attractive and practical display of wheat, corn, oats, rye, hemp, tobacco and garden products, together with a fine exhibit of cotton, and that of tobacco being especially noteworthy in that it represents the finest tobacco-growing districts of the country. Paintings, photographs and maps of agricultural, manufacturing and other scenes along the line of the road are used both for ornamental purposes and for showing the industrial development and scenic attractions of the South. The second exhibit of the company is made in the Virginia Mineral and Timber Building, and consists of wood and mineral products of that State, which is tributary to the road. In the front of the exhibit is an exhibit of colored marbles, surmounted by a bust made from white marble of Loudoun county. The background contains a display of the pines and hardwoods of the State, and the mineral exhibit shows iron, manganese, copper, gold and other ores and soapstones, marbles, brownstones, clays, etc. Another notable feature of this company's exhibit is a solid piece of granite weighing 58 tons from the North Carolina Granite Corporation of Mt. Airy, N. C., and it represents not only the capacity of the quarries, but the transportation possibilities of the road. The wide territory covered by this company makes these exhibits the most distinctive of the Southern resources as a whole.

The exhibit of the Atlantic Coast Line in the States Exhibit Building represents the resources of six States, and these have been attractively arranged in a classified manner, showing samples of products of a wide variety. A feature of the exhibit is the splendid array of the products and by-products of cotton and the largest display of Florida resources shown at the exposi-

tion. The exhibit of cotton shows cottonseed, both long and short staple; the cotton grown from them, the soaps, lards and oil made from the seed, and several products from the cotton. From Florida are shown samples of phosphate rock, rosin and its by-products, sponges, kaolin, timbers, fruits and vegetables. The fruits of Florida are particularly interesting, and include several varieties of pineapples, coconuts, oranges and grape fruits. The commercial woods along the lines of the road are well covered by 34 varieties, including red and white bay, magnolia, red cedar, red and white oaks and pines, black, white and yellow cypress, black, sweet and maple gum, mulberry, basswood, etc., and a number of stumps are exhibited which indicate the sizes of the various trees. The horticultural samples show a varied line of most every common fruit and vegetable, besides many that are rare and can only be grown in the extreme southern part of the country. Agriculture is covered by displays of grasses of 17 varieties, grains, tobacco, cotton, etc., that of tobacco showing the fine grades of Carolina bright tobacco and the valuable shade-grown tobacco from the southern part of Georgia. The rear walls of the exhibit have been ornamentally treated with products from the field, while large paintings show an orange grove, tobacco field, strawberry field, celery field, cotton field and cattle range.

Corn, cotton, tobacco, palms and other tropical plants have been very effectively used in the decoration of the large booth occupied by the Seaboard Air Line. On the outer edge of the booth have been placed a number of cases, one containing several varieties of sheep-wool and cup sponges, another minerals of many kinds, another cottonseed and its by-products showing batting, meal, oil, soap, etc., and another showing the cotton plant in full bloom. Southern timber from all sections of the road have been collected, showing sizes, color and finish of 100 specimens. Mineral deposits from along the line are exhibited in great variety, including Caen stone, granite, marble and other building stones; kaolin, clay and shales from which numerous building supplies can be manufactured; talc, soapstones and monazite from North Carolina; manganese ores from Georgia and Alabama; iron ores, including a number of different hematites, from several States; copper ores and coals from Alabama; slate from Georgia and phosphate rock from Florida. Agricultural and horticultural specimens are shown of citrus fruits, tobacco, vegetables, grains, etc. One interesting exhibit by this company was a section of a turpentine pine, which was brought here direct from the woods, together with full equipment of tools to demonstrate just how the turpentine is extracted from the trees.

The Norfolk & Western Railway has a larger exhibit than any of the other railroads, including 7000 feet in the Virginia and Mineral and Timber Building, 1200 feet in the Machinery and Transportation Building, 900 feet in the States Exhibit Building and 700 feet in the Manufactures and Liberal Arts Building. These various exhibits represent over 25 carloads and 3000 separate and distinct specimens of coals, minerals, timbers, manufactured articles and agricultural products from Virginia, North Carolina, West Virginia, Kentucky and Tennessee. The minerals shown include bituminous coals of the most valuable varieties, building stone, iron ores in great number of specimens, copper ores, manganese ores, zinc, lead, asbestos, etc. A core drill 42 feet long is shown to indicate the great deposit of gypsum in Southwest Virginia, where it covers an area of two miles wide and 20 miles long. Many of the products from these minerals can also be seen in various arti-

cles. The many specimens have all been arranged in a classified manner and tabulated. A large variety of hardwoods and softwoods are arranged according from section from whence they come, and these are exhibited both in the natural log and products made from them, and form a very comprehensive idea of the possibilities in these fields. The agricultural and horticultural samples include all grains, grasses, fruits, vegetables, tobacco, peanuts, etc., and other products which are being successfully grown on lands tributary to the road. In this respect the company's model farm, embracing the very latest ideas in modern agriculture, is shown in miniature form. Taken altogether, the exhibits of this company represent in a very exhaustive way the opportunities which are available in many varied fields in the sections tributary to its lines.

The Chesapeake & Ohio Railroad has four separate exhibits, one being in the States Exhibit Building and devoted to a general display; two in the Virginia Mineral and Timber Building and covering separately minerals and timbers, and the fourth in the Machinery and Transportation Building. These booths contain exhibits from Virginia, West Virginia and Kentucky, and they have been assembled and arranged in such a way that a good idea can be easily formed of the resources abounding in the sections which are represented. The general exhibit in the States Exhibit Building covers practically all of the principal products in the mineral, timber, agricultural and horticultural field, while the timber and mineral exhibits go more into detail concerning these two classes and contain many individual and interesting specimens, and the transportation exhibit consists of one of the company's trains, including one of its newest engines and tenders, a combination coach and a day coach. The feature of the general exhibit are the samples of coals which the company handles in large quantities, the many grades of medicinal and mineral waters, bottles of which are always kept

on tap for visitors, and a large handmade map on the wall, which not only shows the territory which its line covers, but also the principal resources in the properties adjacent to them. This is the first attempt on a large scale which the Chesapeake & Ohio has made to exploit the many valuable resources along its lines, and the broad and exhaustive manner in which they have been covered reflects great credit on the company.

The exhibit of the Norfolk & Southern in the States Exhibit Building is especially interesting, in that the samples of products shown come from perhaps the greatest trucking section in the country—Tidewater Virginia and Eastern North Carolina. Here are shown samples of the famous horsetooth corn, also other grades of corn, and numerous kinds of potatoes, onions, tomatoes, spinach, watermelons and other truck of the finest quality. This also is a great peanut-growing section, and these can be seen in this exhibit in varieties numerous enough to be indicative of the importance of the crop. Samples of cotton, tobacco and many kinds of nuts are leading crops and well exploited, likewise samples of wheat and oats grown from reclaimed lands in the Dismal Swamp, the latter showing the possibilities of what has generally been considered a vast waste and worthless section. The timber possibilities along the line are exhibited in samples of pine, gum, ash, maple, juniper, cypress, oak and hickory, while the variety of wild game abounding in this territory is well shown in the many stuffed specimens. The recent extensions of the railroad and those in course of construction will greatly add to the importance and possibilities of this section.

In giving a brief outline of the resources, developed and undeveloped, of the South, as shown by the exhibits of the various railroads, no attempt was made to cover them in detail, as this will be done in subsequent letters on timber, minerals, agriculture and manufacturing.

WILLIAM H. STONE.

THE COTTON SITUATION IN EUROPE

By ALFRED B. SHEPPERSON.

[Written for the Manufacturers' Record.]

Having traveled on the Continent and in England for some weeks, with exceptionally good facilities for obtaining reliable information, I beg to submit, on the eve of sailing from Liverpool for New York, my impressions respecting the cotton situation in Europe. The Continental spinners have generally done a very active and remunerative business during the past year, and many of them have good orders on their books for several months ahead. Even in Russia there has been a full consumption of cotton by the mills, notwithstanding the many riots and the general unrest in some districts. The Continental mills have bought cotton far beyond their requirements, and probably hold larger stocks of actual cotton than ever before at this time of the year. Practically the same conditions have prevailed with the English cotton mills, though at present the demand for yarns and goods has slackened somewhat.

My friend Mr. Thomas R. Ellison of Liverpool, who is justly regarded as the best authority on the subject, estimates that in the 43 weeks ended July 31 the English mills have consumed 3,268,000 bales of cotton of all kinds, against 3,182,000 bales for the corresponding time last season, while the Continental mills have consumed 4,515,000 bales, against 4,343,000 bales last season.

The estimated increase in consumption has been 86,000 bales of 500 pounds net weight by the English mills and 172,000

bales by the Continental mills, thus making a total increase in consumption by all European spindles of 258,000 bales of cotton. The increased production of the mills is due to the general prosperity which has prevailed throughout Europe during the past year, and especially among the working classes, who have had almost constant employment, and in many industries at increased wages.

The stocks of actual cotton held by the English mills on July 31 are estimated as 516,000 bales (of 500 pounds net weight), against 408,000 bales at the same time last year, while the Continental mills are estimated as holding 1,432,000 bales, against 871,000 bales at the same time in 1906. The total mill stocks of Europe were estimated as 1,948,000 bales, being 669,000 bales more than at the corresponding time last year.

The spinners all over Europe have generally bought cotton from the present crop far beyond their actual requirements. The reason for this liberal buying at comparatively high prices was that after the severe storms in the Southern States last September there was quite a general apprehension among the spinners that there might not be sufficient cotton of good quality to meet legitimate requirements. In their great eagerness to promptly secure enough for their needs, the European spinners bought considerably more cotton than necessary for their wants for the season. It was this eagerness to secure the good

grades which evidenced the differences between the better and the lower grades of cotton to an extent not recalled in recent years. In the scramble for good grades of cotton the American spinners kept pace fully with those of Europe.

While the European spinners held 1,948,000 bales of cotton on July 31, the "visible supply" (or cotton in the markets of the world and at sea) amounted to 2,207,000 bales of all kinds, not including, however, 710,000 bales of India cotton in Bombay warehouses. The visible supply was 610,000 bales more than at the corresponding time in 1906. No one can desire more heartily than I do that the South should obtain the very highest price for its cotton that trade conditions will justify, but in view of the large supplies of cotton it would scarcely be reasonable to expect a large demand at present prices from European spinners for the September receipts of cotton from the new American crop unless there should be some very unfavorable developments respecting the yield of the crop. There will, of course, be a limited demand from spinners for special grades, and some demand from Southern dealers who have sold specified grades of cotton for September shipment, but it seems quite doubtful if the demand from these two sources will be sufficient to maintain present values, especially if the receipts of new cotton should be upon a fairly liberal scale.

Liverpool, August 27.

WEST VIRGINIA TIMBER.

Much of It Still Untouched by the Axe.

[Special Cor. Manufacturers' Record.]

Webster Springs, W. Va., August 29.

Webster county, among the last in West Virginia to feel the impulse of the new life that has animated the State for the past few years, has come rapidly up to the front rank in the matter of timber development and the general diffusion of prosperity that the sale of their lands at fair prices has meant to the people. When the Baltimore & Ohio Railroad built its Richwood branch it passed through a very considerable extent of Webster county's territory, opening up timber lands theretofore of little value owing to the fact that there was no way by which the timber could be gotten to market. Elk river, which traverses the county, is a comparatively smooth stream, and logs could be floated out during high water, but the Gauley, which takes its rise in this county and flows through the southeastern portion, is so rough that such logs as could be finally drifted out were good for little else than the toothpick factory. The Baltimore & Ohio Railroad, therefore, opened up a territory and put a value on the lands that had before been of little account in the general valuation of the property of the State. Richwood, built at the southeastern terminus of the road, has come to be the greatest lumber town in the State, as told in a previous letter. Col. John T. McGraw, who owned some fine timber lands on Holly river, which put into the Elk about 25 miles below this place, where the Baltimore & Ohio crosses the latter, began to take off the timber some 10 years ago, building a narrow-gauge road from the mouth of Holly up that stream and into the forests. Extending his road by little and little to get into the timber, he finally found it so close to this place that he determined to bring it here. To do this necessitated the crossing of a very high mountain, but the mountain was finally crossed, and this place reached about six years ago. Many millions of feet of lumber has been sawed on the line of this road and taken to market over its narrow track, yet the timber of the county is hardly touched, and Colonel McGraw is

engaged in extending it still further to reach the heart of the great forests still untouched by the axe of the woodman. The Elk river divides here into the "Black Fork" and the "Main River," and up both these branches the road is now being built. The road is now known as the West Virginia Midland.

But the work for the present seems to be languishing, and thereby a tale of much interest is supposed to hang. Senator Henry G. Davis and his associates, owners of the Coal & Coke Railroad, are thought to have an eye on the McGraw road, and it is believed they will become its owners before very long. They own immense timber tracts in this county further up the "Main River," and they are thought to have a desire to develop their holdings. The Coal & Coke comes up the Elk river from Charleston to Gassaway, which is about 45 miles below this place, leaving the river there for its cross-country run to Elkins, and leaving some miles to the east the town of Sutton, county-seat and most important point in Braxton county. The people of Sutton did not like this, so they set to work to make it an object to the builders of the road to build to their town. This was done, and the owners are now under contract to extend their road from Gassaway up Elk river six miles to Sutton. This will bring it within 35 miles of this place, and, as stated above, it is thought they have a mind to farther extend it. Senator Davis and some of his co-owners in the road were here last week, and Colonel McGraw was expected to meet them here, but was detained at home and did not arrive. It is thought that the meeting would have meant the consummation of the deal whereby the McGraw road would have passed over to the owners of the Coal & Coke. If the Coal & Coke acquires the McGraw road the latter will doubtless be turned into a standard gauge and the tremendous climb up and down Holly mountain be done away with, either by bringing the road up the Elk river all the way or else by tunneling through from Holly to Elk. This will make a much better route, but it will destroy the most picturesque railroad ride in West Virginia, for the run from the foot of the mountain on the one side up a steep grade for several miles to the top and then down the other presents one of the most gorgeous scenic trips to be found anywhere.

However, it is, with the utilitarian rather than the esthetic we have to deal just now, and the beauties of the ride to reach this place must be left to the descriptive writers.

The timber growing in this county is of the finest grade of poplar and white oak, with a great deal of cherry mixed in with it, as well as hemlock and spruce, and good bodies of timber lands have reached what a few years ago would have been deemed fabulous prices. A story illustrating this is going the rounds of the press—and it is true—about a purchase and a sale of land made by one Enoch Morgan, a resident of Marion county. Mr. Morgan a few years ago found himself in possession of more miles than he could find market for, and in the effort to sell them was offered 850 acres of Webster county lands for animals valued at \$1500. He made the trade and became the owner of the land, which was well timbered. He did nothing with it, simply kept the taxes paid, and thought little about it. A few days ago he sold the timber on the land for \$42,000, retaining the surface and the mineral. It is said to be underlaid with a fine deposit of coal, which will finally bring him as much as the timber. Reads like a romance, doesn't it? I know also the story of a man who had the opportunity to do better yet, and didn't. A young

man well known to me was here in 1881, when lands belonging to the school fund, having been returned delinquent and sold for taxes and bought in by the State, were being sold by the sheriff. He purchased 1700 acres of these lands lying on Grassy creek, and now traversed by Colonel McGraw's railroad, paying therefor \$306, that being the amount of taxes due. The title he got was absolutely perfect. The money to make the purchase was lent him by a rich friend, who said he could pay it back when he wanted to. The young man went away to another State to live, and about five years after the purchase of the land deeded it to the friend from whom he borrowed the money to make the purchase to pay the loan. That was in 1886. In 1893 he visited this State and was offered \$10 an acre for the timber on the land—\$17,000. The man, no longer young, is here now on a visit. He came through the land he formerly owned on the railroad as he came here. If he still owned that property he could now get \$85,000 for the timber and reserve the surface and the coal, of which latter there is an abundance. That romance did not end so happily, did it?

The Pardee & Curtin Lumber Co. owns 32,000 acres of virgin forest in this county, enough to keep it busy for many years after it finishes up its Cherry river lands near Richwood, which will occupy it for a good many years yet. The tract of land owned by the Davis crowd contains 25,000 acres, and this is also virgin forest. Besides these, there are several other large bodies held by single individuals or companies, together with very many small ones that will make Webster county a great lumber producer for 50 years to come.

The only attraction here at present is a wonderful salt sulphur spring, the medicinal qualities of the water from which have become widely known, so that hundreds of visitors come every season to partake of it and get the benefit of its virtues. Colonel McGraw has a large and elegant hotel here that proves a most attractive place to many people who have formed the Webster Springs habit. Because of this, probably, the United States District Court for the district of West Virginia holds an annual session here during the heated term. It forms a great combination of business and pleasure. GEO. BYRNE.

BUILT WITH A PURPOSE.

Judgment in the Location of Elkins Justified.

[Special Cor. Manufacturers' Record.]
Elkins, W. Va., September 2.

The location of cities is one of those things that chance seems to govern more often than design. It has been said that New York should have been located up the Hudson, London on the channel, Chicago at a more pleasant and eligible point on Lake Michigan. And the reasons for these various mislocations are lost in the history of the particular city to which they apply. No one, however, need look far to find the reason why the city of Elkins was built where it is. It was because man designed it so.

When ex-Senator Henry G. Davis began the great work of development which he has carried on for the past 25 years in West Virginia he recognized with farseeing eye that somewhere in the Tygarts valley there would be builded a city of importance, and he did not propose to leave to chance the choice of location. So about 20 years ago Senator Davis and his associates purchased a large tract of land here and laid out a city, which, in honor of one of their number, they called Elkins. The choice of location was well made, not only from the standpoint of physical beauty, healthful altitude and scenic splendor, but from the utilitarian standpoint of indus-

trial adaptability as well. Two thousand feet above sea-level, the air here is pure and electric, free from the miasma of lower altitudes, and the good health of the people is assured. Mountain water of sparkling clearness and chemical pureness was of easy acquirement, and has long ago been brought to the door and inside the home of every resident. On every side, awaiting the arrival of the pick and the axe, coal of unsurpassed richness underlaid the earth's surface, and timber of virgin growth adorned the mountain-side. These resources, it was seen, would be developed and their riches poured into the lap of a city thus situated, while at the same time it would be free of the noisome dust, the uncertain population and the many other disadvantages of actual contact with lumber camps and mining towns. And back of these resources and advantages, bracing and strengthening them as the backbone braces and strengthens the whole body, lies a farming and grazing section of unsurpassed fertility and productiveness. Bluegrass is indigenous to this soil, and the disappearance of the undergrowth from the forests is invariably followed by a set of sod without the trouble or expense of sowing the seed. What, then, was lacking to make this the ideal location of a city?

Nothing but the intelligently-directed enterprise of man, and that Senator Davis and his congeners supplied.

Radiating from Elkins in five different directions, the railroads have made it a central point for a large scope of country, direct communication with which gives it great advantage in the matter of trade and traffic. In this respect its position is unsurpassed by that of any other West Virginia city. The main line of the West Virginia Central Railroad, running from Elkins to Cumberland, a distance of 113 miles, passes through a region rich in coal, timber, limestone, fire-clay and other valuable material. Extending toward the south the Coal & Iron Railroad taps the Greenbrier Valley branch of the Chesapeake & Ohio at Durbin, 47 miles away, opening up a country immensely rich in timber, embracing hemlock, spruce and the hardwoods, which stand upon the ground so close as to make the statement of average yield per acre sound fabulous. Up the Tygarts valley 18 miles, to the good old town of Beverly, runs a branch of the West Virginia Central, putting the city in touch with one of the most productive farming sections of the State, as well as bringing into close proximity a region of great richness in timber. Another branch of the same road runs to Belington, 18 miles down the Tygarts Valley river, where it forms a junction with the Baltimore & Ohio, which gives direct connection with Wheeling, Pittsburg and all points east and west. Along the line of this Belington branch of the West Virginia Central are to be seen a number of the great mines of the Davis Colliery Co., with coke plants of large capacity. From Elkins 170 miles southwest to Charleston runs the Coal & Coke Railroad, the latest acquisition of Senator Davis and his associates in the railroad line. Between these termini the road opens up a tremendous stretch of coal territory, of which Senator Davis and his associates own something like 200,000 acres in one continuous body.

By the way, the mention of the Coal & Coke Railroad as a recent acquisition of Senator Davis recalls an incident that is illustrative of the tireless energy of that wonderful man. When the West Virginia Central road, which had been built by Senator Davis, was sold to the Wabash interests the Senator soon bought the Charleston, Clendennin & Sutton road, then extending from Charleston to Clay, 52 miles up Elk, and about to be finished to Otter, 15 miles further. He then set

out to connect this road and his Roaring Creek road, which was building from this city to the southwest. Less than two years ago I met Senator Gorman in Baltimore and he began talking about Senator Davis, telling of his remarkable strength and activity, he being then more than 81 years of age.

"Senator Davis wired me to meet him in this city some time ago," said Senator Gorman. "I came to the hotel late the night before the engagement and retired without seeing him. Next morning I came down to breakfast about 9 o'clock, but could not find Senator Davis. I waited some time and then ate my breakfast alone. About 10 o'clock he came in, and when I taxed him with being late he said he had risen at 7, had eaten breakfast, gotten a shave and walked several miles about the city. Soon we fell to talking about the Coal & Coke road, in which I have some interest, and Senator Davis said: 'Representatives of the Wabash and the Baltimore & Ohio have been to Elkins to see me recently about buying the Coal & Coke, but I told them I didn't want to sell. Why, Arthur, if I sold that road I wouldn't have anything to do.'"

Eighty-one years of age, and fearful lest he should acquire habits of idleness!

This city is beautifully laid off, with broad streets and avenues, and the buildings are handsome and up to date. The mercantile establishments are many, and all bear the impress of substantiality and prosperity. Among these are a number of wholesale establishments of more than usual size and activity that find their support among the retail stores along the lines of the various railroads that put them within easy reach of this city.

The industrial development is represented by the car and machine shops of the West Virginia Central Railroad, which now employ 250 men, and which are to be doubled in capacity soon; the Elkins Machine & Foundry Co., employing 20 men; the Elkins Brick Co., with 30 men; the Elkins Brewing Co., manufacturer of beer and ice, with 20 men; the Elkins Tanning Co., with 75 men, and with plans maturing to double the size of the plant and the number of employees; the Elkins Pail & Lumber Co., manufacturer of buckets and other lumber products, with 100 men; the Elkins Fixture & Refrigerator Co., with 100 men; the Elkins Planing Mill, the Dalton Boiler Works, the Elkins Handle Factory and other smaller plants of various kinds. The proximity of rich timber areas and the possession of cheap fuel—natural gas, coal and coke—make Elkins a particularly eligible location for wood-working industries of many kinds. Natural gas brought here from Lewis county, a distance of 50 or 60 miles, is furnished for domestic purposes at 20 cents per 1000 feet, and for factory purposes at 8 cents.

The banking facilities of the city are ample, and the management of its financial institutions is particularly liberal toward those enterprises of a quasi-public nature. The Trust Company of West Virginia, founded by Senator Elkins, and having its home here, has a paid-up capital and surplus of more than \$300,000, while the Elkins National Bank, of which Senator Elkins is the head, has capital and surplus of more than \$100,000. The two have deposits of more than \$1,500,000. The People's Bank, organized about a year ago, has a capital of \$50,000 and a good line of deposits.

An electric traction line is now being constructed through the city on its principal streets, and will be extended to Beverly, 18 miles up the valley. The main thoroughfares of the city have already been paved with brick, and work is now being done upon some of the side streets.

Inside of a year this will probably be the best-paved city of its size in the State.

Special attention has been paid to the matter of the education of the youth of the city, and the public schools of Elkins rank with the best in West Virginia. Nor are the educational advantages offered by the public schools all that are to be enjoyed here. Senators Davis and Elkins have endowed and established the Davis and Elkins College, an institution of learning of high rank, and one whose influence is felt throughout a wide scope of territory. It has fine college buildings, a faculty that embraces a number of scholars of high rank, and is in all respects a most valuable and worthy institution, and one of which the entire citizenship is justly proud.

Davis Memorial Hospital, a handsome and well-appointed building, stands here as an enduring monument to the humane instincts and Christian character of Mrs. Henry G. Davis, who died several years ago. Having actively interested herself in the effort to ameliorate the condition of the sick, wounded and suffering, Mrs. Davis, backed by the generous purse of her husband, began the erection of the hospital some time before her death, but was called away before its completion. To carry the work on afterwards was a labor of love for the husband left to mourn so estimable a helpmeet, and it now stands a worthy tribute to her loving kindness.

As a place of residence Elkins is attractive beyond description. The beautiful location has been taken advantage of for the erection of many elegant and costly homes, the tasteful arrangement and furnishing of which tell with force and truth the story of the refinement of the inhabitants.

GEORGE BYRNE.

Bank Reports.

The First National Bank of Richmond, Va., reports August 22, 1907, loans and discounts, \$5,755,108; cash and due from banks, \$1,003,760; capital, \$1,000,000; surplus fund, \$600,000; undivided profits, \$139,923; circulation, \$1,000,000; deposits, \$5,297,646; total resources, \$8,700,763. John B. Purcell is president; John M. Miller, Jr., vice-president and cashier; Chas. R. Burnett and J. C. Joplin, assistant cashiers.

The First National Bank of Birmingham, Ala., reports August 22, 1907, loans and discounts, \$6,079,575; total cash, \$2,830,961; capital stock, \$1,000,000; surplus and profits, \$639,379; circulation, \$950,000; total deposits, \$7,797,074; total resources, \$10,540,454. W. P. G. Harding is president; J. H. Woodward, vice-president; J. H. Barr, vice-president and cashier; F. S. Foster and Thos. Bowron, assistant cashiers, and J. E. Ozburn, secretary savings department.

Higher Interest Rate.

[Boston Herald.]

There is perhaps a pointer for Boston in the offer of the acting comptroller of New York to sell \$40,000,000 of 50-year city bonds bearing 4½ per cent. interest. This move was decided on after the failure to obtain the amount of money required to tide the city over "with rigid economy until next spring" on two recent offers of 4 per cent. bonds. Neither the banks nor the public would take them—not from any lack of faith in the city's credit, but because ready money commanded a higher rate.

Preliminary to the trip this fall by President Roosevelt down the Mississippi in the interest of waterways improvement, the Inland Waterways Commission will make a trip along the upper stretch of the Mississippi, leaving St. Paul, Minn., September 27 and reaching Keokuk, Iowa, October 1, where the President will be joined.

CURRENT EVENTS AS VIEWED BY OTHERS

THE RAILROAD COMPLICATION.

[Farmers' Union Guide, Birmingham, Ala.]

There is enough in the newspapers to inform the readers of the *Guide* on the recent issue sprung on railroad regulation, and it is not the purpose of this article to present any views of our own on the facts involved in the merits of that issue.

There are matters growing out of the complication which has arisen in court proceedings invoked by the railroads in which the great minds of the people of the State are interested, and which doubtless attracts their attention, and upon which we submit a few comments, or rather axiomatic brevities.

The question of State rights is not in issue in the procedure before the courts, and has not been, although it has been attempted to bring that element into it.

The United States courts are as much the courts of the people as the State courts; both have their being in the voice of the people.

The Supreme Court of the United States has been the great bulwark of defense in all our civil history and political agitation of States' rights.

The people have nothing to fear from a final adjudication and adjustment of the railroad unpleasantness by the United States Supreme Court, while the railroads have everything to dread.

The action of certain railroads in filing bills in the Federal courts asking for an adjustment of their rights and the protection of their property was a proper thing to do, and is not a defiance of State laws nor assault on State rights.

If the inferior Federal courts do not have jurisdiction in the matters litigated, the Federal Supreme Court will so declare.

The courts, both State and Federal, are the places to go to settle the grievances complained of in a legal way peaceably, and the issues of railroading are of such a complicated nature that the people's Federal courts are the best medium of settlement for the whole country, as every State in the Union is concerned in such settlements, though the issues may be local in their nature.

A State that would call out the militia, as reported will be done to enforce a local law in the hands of the judiciary for adjudication, would be guilty of mob supremacy.

Militia as executors of the law can only be called out to enforce laws that are resisted, and it is no resistance of the law for individuals or corporations to ask the courts to determine their duty and relation to such laws.

After a determination adverse to the law to call out the militia to enforce it would be usurpation of the province of judicial authority.

The safety of life, liberty and property is in the judiciary, and if we lose our hold on it hope flickers and darkness is threatening our civil life.

To threaten to call out the militia to resist the action of a court in the lawful pursuit of methods to ascertain rights and to adjust them on the basis of justice and equity between parties is an attempt to incite a mob spirit and to bring about anarchy.

States can be guilty of a mob spirit as well as individuals. The Federal Government is not free from such influences.

The spirit of mob law often aroused in communities is an exposition of what it sometimes has been and what it might be-

come in States and in the federation of States in the extremes of agitation.

There will be plenty of time after the reading of the courts on the issues of the State laws, or their force, to call out the militia. Can't we wait and keep our temper until then? Guess we'd better do so.

[Macon Telegraph.]

Georgia is 40 years behind Illinois or Indiana in railroad equipment and development. Those States have had 50 years and more of prosperity, and their railroads have double tracks and are brought up to a high state of development.

But we Georgia folks could not wait. Word was passed that millions could be taken from railroad revenues and put into the pockets of shippers. A rush was made to grab the money, and let development and double tracks wait for a more convenient season.

The policy is suicidal, but our new commission—the "Administration's Commission," as they call it—declares for such a policy.

And when it is recalled that 80 per cent. of the business is interstate and only 20 per cent. is intrastate, how foolish to pursue a policy that stops all development and growth, besides driving away capital.

Our roads having comparatively recently emerged from the wreckage of war, have had only some 12 years of prosperity. Did we not raise a big fuss too quick? Why not have waited, at least, a few more years, when there would have been double tracks, better equipment and more roads?

ENGLISH COAL RAILWAY RATES.

[Colliery Guardian.]

It is an undoubted fact that the export rates for South Yorkshire coal are not excessive, and colliery owners would be the first to admit this. Mr. Parker Rhodes, in giving evidence before the Coal Commission, put in a table showing the approximate average distances and rates from South Yorkshire collieries to different ports, which we reproduce here:

Port.	Approximate average distance in miles.	Rate per ton.	Amount per ton per mile.
Hull.....	50	2 6	.090
Goole.....	26	2 0	.223
Grimsby.....	60	2 6	.500
Partington....	48	2 8	.666
Liverpool.....	75	3 2	.566

These rates may appear high when contrasted with those charged by American railways, but they compare favorably with some of those in force in other coal fields.

SUGAR.

[The Louisiana Planter.]

The marvelous growth of the sugar industry is shown in the accompanying table of the sugar production of the world during the last 56 years, stated in long tons and in its elemental parts of cane and beet sugar. The sugar produced in India, some 2,000,000 tons per annum, is omitted from these statistics because it is consumed entirely at home and does not enter into the general consumption of the world.

A study of this table will be found very interesting. The cane-sugar crop of 1850 was 1,100,000 tons, against 5,600,000 tons 56 years later. The beet-sugar crop of 1850 was 200,000 tons, against 6,700,000 tons 56 years later, and the total crop of 1850, some 1,300,000 tons, 56 years later reaches over 12,000,000 tons. Now that the low prices of sugar have brought out conspicuously the facts as to the great good value of sugar both for man and beast, it becomes very probable that the

present total crop of some 12,000,000 tons of sugar will reach 100,000,000 tons 50 years hence. Mr. Otto Licht, in compiling his table, reports the sugar crops as follows:

Season.	Cane sugar. Tons.	Beet sugar. Tons.	Total. Tons.
1850-1851.....	1,106,415	296,349	1,402,764
1851-1852.....	1,207,558	212,239	1,419,797
1852-1853.....	1,259,033	249,467	1,508,500
1853-1854.....	1,421,006	237,312	1,597,318
1854-1855.....	1,339,051	218,799	1,557,850
1855-1856.....	1,335,593	274,950	1,610,543
1856-1857.....	1,279,745	299,352	1,579,096
1857-1858.....	1,408,142	401,108	1,813,250
1858-1859.....	1,483,856	453,226	1,917,182
1859-1860.....	1,590,216	474,292	2,064,508
1860-1861.....	1,464,621	403,235	1,867,856
1861-1862.....	1,719,221	444,880	2,164,101
1862-1863.....	1,522,296	508,401	2,030,697
1863-1864.....	1,626,714	488,341	2,115,055
1864-1865.....	1,584,764	587,337	2,172,101
1865-1866.....	1,588,766	745,486	2,334,252
1866-1867.....	1,645,784	808,452	2,454,236
1867-1868.....	1,532,627	701,178	2,233,806
1868-1869.....	1,705,122	776,299	2,481,421
1869-1870.....	1,743,178	910,710	2,653,888
1870-1871.....	1,827,240	1,078,957	2,906,197
1871-1872.....	1,726,238	1,014,036	2,740,274
1872-1873.....	1,930,219	1,239,215	3,169,434
1873-1874.....	1,990,459	1,235,569	3,226,028
1874-1875.....	1,976,970	1,242,058	3,219,028
1875-1876.....	2,162,973	1,454,867	3,617,840
1876-1877.....	1,996,087	1,229,573	3,195,660
1877-1878.....	1,881,416	1,485,113	3,366,529
1878-1879.....	2,009,172	1,633,391	3,642,563
1879-1880.....	2,104,167	1,473,992	3,578,159
1880-1881.....	2,119,665	1,797,278	3,916,943
1881-1882.....	2,090,396	1,846,245	3,936,641
1882-1883.....	2,428,645	2,162,873	4,591,518
1883-1884.....	2,280,565	2,438,354	4,718,919
1884-1885.....	2,451,296	2,615,903	5,067,199
1885-1886.....	2,257,134	2,226,790	4,483,924
1886-1887.....	2,575,066	2,736,151	5,311,217
1887-1888.....	2,762,791	2,459,205	5,221,996
1888-1889.....	2,705,264	2,752,641	5,457,905
1889-1890.....	2,569,831	3,617,433	6,187,264
1890-1891.....	2,815,135	3,689,433	6,504,568
1891-1892.....	2,833,895	3,476,905	6,310,800
1892-1893.....	3,322,474	3,420,424	6,742,898
1893-1894.....	3,393,796	3,679,881	7,073,677
1894-1895.....	3,755,056	4,775,458	8,530,514
1895-1896.....	3,555,721	4,353,949	7,909,670
1896-1897.....	3,011,422	4,911,101	7,922,523
1897-1898.....	3,178,461	4,852,154	8,030,615
1898-1899.....	3,176,841	4,981,007	8,157,848
1899-1900.....	3,069,287	5,444,316	8,513,603
1900-1901.....	3,308,726	5,948,521	9,257,247
1901-1902.....	4,078,482	6,709,872	10,788,354
1902-1903.....	4,289,149	5,523,028	9,812,177
1903-1904.....	4,440,892	5,856,833	10,297,725
1904-1905.....	4,715,230	4,965,286	9,680,516
1905-1906.....	5,207,921	6,888,257	12,096,178
1906-1907.....	5,600,000	6,700,000	12,300,000

RICHMOND A MODEL.

[Pittsburg Dispatch.]

Without incurring any great public debt Richmond has evolved a delightful system of parks, paved hundreds of miles of streets, erected highly creditable public buildings and established a city of homes as well as a commercial center of note. Probably no other city in the country has planned and executed a proportionate amount of public works at as small expense as the city of Richmond. Some of the expense has been borne by the State of Virginia—the Statehouse, the grounds, a number of monuments and so on. But the point is that all has been done without apparent graft or extravagance—a lesson in patriotic duty to all the country. We cannot say certainly that Virginians are inherently more honest than their neighbors in other States, but if they are not, then they may say devoutly: "Sweet are the uses of adversity."

AUTOMANIACS.

[Fall River Daily Herald.]

The misuse of automobiles is more dangerous than that of railroad trains, because of the more immediate danger to the general public involved. The only difference seems to be in the number of people killed at one blow. The weekly sacrifice of human lives through this new form of insanity is ten times larger than that of the railroad and railway victims. Reckless drivers should have been brought to their senses by its enormity a long time ago. They, unfortunately, have not, and no amount of press preachment will do it. The slaughter will continue. One might as well expect to stay the rising tide. Fools, with a qualificative that would not look well in print, will continue to risk their own lives and those of countless

others in an attempt to break records, but oftener succeeding in breaking only their own necks and mangling their relatives and friends who thought them sane and trusted themselves into their keeping.

WATER POLLUTION.

[Harrisburg (Pa.) Star-Independent.]

Man is the architect of most of his misfortunes; he is directly responsible for most of the ills that assail him, and he is indifferent to the comfort, convenience and health of his fellows. He should be compelled by law to refrain from polluting streams with sewage and deleterious matter from industrial plants. It should be the business of somebody in every community to examine the water frequently and give notice of its condition. In short, every community should take common-sense precautions to make impossible an outbreak of any preventable disease.

HOODLUMS.

[New Orleans Picayune.]

The gang of young men now in the parish prison on a charge of being concerned in the murder of another young man, and with seriously wounding a police officer with murderous intent, are a characteristic sample of the youthful criminals that are the product of our present labor and educational system.

These boys go to the public schools and get an education which should enable them to engage in some honest work so as to become useful members of society. Instead of being able to enter some respectable trade as apprentices and so learn the business from the bottom up, they are barred out by the rules of the trade organizations, and they must find some job in the ranks of unskilled labor. They do not find there any of their class associates, and, moreover, unskilled labor is not inviting to any except the ignorant and those who are unable to find any other occupation and are determined to work at something.

The average young man is not of that sort, but he would work if he could find a decent place. But places are not found at every turn, and so he becomes a member of a gang of street loafers, and sooner or later a criminal.

There is a widely-held belief that intellectual education is all that is needed to develop the qualities that make the best citizens. But the defect is that the young man who must work for a living comes out of the ordinary school ignorant of everything that should make him an industrious and useful member of society. If he had attended an efficient industrial school he would know something practical, and he would in all probability have acquired a taste and disposition to do useful work.

But no such benefits are in his reach, and if he grows up an idler and a criminal the more education he has received and the more intelligence he possesses the more will he be a dangerous member of the community in which he lives. There are no means under our free institutions to force men to work. One of their liberty-given rights is not to work, but since he must live, he loafs and sponges on his family and friends as long as they will permit, and then finally becomes a full-fledged criminal.

It is the greatest defect in our grand democratic-republican system of government that no effective means are provided to prevent its young men from growing up as criminals and public enemies.

RAILROADS

[A complete record of all new railroad building in the South will be found in the Construction Department.]

GEORGIA CENTRAL'S YEAR.

Higher Wages and Cost of Materials—Much Betterment Work Done.

The twelfth annual report of the Central of Georgia Railway Co., covering the fiscal year ended June 30, displays a gratifying increase in the gross earnings, the total being \$12,082,777, the gain having been \$680,654 as compared with the fiscal year ended June 30, 1906. But on account of a large increase in the expenses and taxes, owing to greater charges to the operating account, the net earnings show a falling off, the total being \$2,476,561, a decrease of \$684,348 as compared with the preceding year, an amount which is nearly equal to the gain in the gross. The total income of the company was \$2,788,500. Out of this was paid interest on debt, rentals and miscellaneous charges, making a total of \$2,340,374 and leaving a balance of \$448,126. Added to this was the sum of \$12,036.95 credited direct to profit and loss account, making a total of \$461,062.95. Out of this there is reserved the October interest on the income bonds, leaving an excess of \$32.95, which, as compared with last year, is a decrease of \$541,178. The total assets of the company are \$64,467,572, the capital stock is \$5,000,000 and the funded debt is \$50,473,000. There is no floating debt.

During the year there were 205 new industries established on or near the Central of Georgia lines, with a total capital of about \$4,500,000 and with nearly 6000 hands employed.

Referring to the difficulties of operation, President J. F. Hanson says that the reason the financial results were not as satisfactory as recently is because of a large increase in wages and also greater cost of nearly all materials. The congestion of traffic, brought about by inferior coal and for a while by insufficient motive power, was relieved by the arrival of new equipment. Lack of adequate terminal facilities also hindered the movement of traffic, but during the year large expenditures have been made to increase these facilities, and further expenditures for similar improvements will be necessary for several years.

The company has done considerable betterment work, including the building of new side-tracks and spurs, besides additions to yards. The Greenville & Newnan Railway, about 24 miles long, was also completed and put in service. Bridges have been improved, passing tracks built and considerable new rail put in the track. The shops at Savannah were extended and the construction of the large new shops at Macon, Ga., has begun. A great deal of other work to buildings has been done, including the erection of new depots at Marshallville and Fort Valley, Ga., these structures costing from \$8000 to \$9000 each. The work on the shops, roundhouse and yards at Cedartown, Ga., has been completed at a cost of over \$88,000, most of which was spent this year. The equipment of the company has been much increased.

American Locomotive Report.

The sixth annual report of the American Locomotive Co. has been issued, and covers the fiscal year ended June 30, 1907. It shows gross earnings of \$49,515,486, an increase of \$6,967,609 as compared with last year. The expenses were \$42,744,381, an increase of \$6,659,010, and the net earnings were \$6,771,105, an increase of \$308,599. After the payment of interest on bonds of constituent compa-

nies, bills payable, etc., there was left a profit of \$6,358,206, an increase of \$177,513. After the payment of dividends of 7 per cent. on the preferred and 5 per cent. on the common stock there was left a surplus of \$3,358,206, a decrease of \$759,986, this being the result of the greater total of the common-stock dividend, which amounted to \$1,250,000, an increase of \$937,500 over last year. After deducting \$2,000,000 for extraordinary additions and the betterment fund there was left a net credit to profit and loss of \$1,358,206, an increase of \$241,578. It is to be noted that in addition to liberal disbursements for the maintenance and replacement of the plants, included in expenses, there was spent for improvements and additional property \$1,692,858, which was paid out of the fund of \$2,000,000 created June 30, 1906.

President W. H. Marshall further says that during the fiscal year just closed the company had the largest output and did the largest business in its history. Moreover, its capacity has been substantially increased by the erection of new shop buildings, power plants, machinery, equipment, etc.

The total assets of the company are \$74,501,672, and the cost of the property is given as \$46,925,096. The capital stock consists of \$25,000,000 of common and \$25,000,000 of preferred. There is no funded debt excepting that of constituent companies, which amounts to \$2,992,500.

Frisco's New Financial Plan.

At a recent stockholders' meeting of the St. Louis & San Francisco Railroad Co., held in St. Louis, the proposed mortgage bond issue of \$115,000,000 was formally approved, as well as the proposed increase of the capital stock from \$100,000,000 to \$200,000,000. Of the new issue, \$47,284,000 of bonds will be used, if needed, for extensions, betterments, improvements and acquisitions. Out of this amount \$10,000,000 will be issued this year, the proceeds to be used for reimbursing capital expenditures and for additions, improvements and betterments.

The rest of the total amount of bonds will be disposed of thus: \$62,816,000 for retiring, taking up or acquiring bonds and notes of various lines in the system, and \$5,000,000 for aiding these funding operations. The balance of the \$47,284,000 of bonds remaining after the issue of \$10,000,000 this year may only be issued in fixed amounts during a period of nine or ten years.

From Lawton, O. T., it is announced that the St. Louis & San Francisco branches known as the Oklahoma City & Western Railroad and the Blackwell, Enid & Southwestern Railway have been transferred formally to the system. They have, however, always been Frisco lines and known as such.

New Equipment, Rails, Etc.

The Missouri, Kansas & Texas Railway has filed a mortgage for the purchase of 2000 box cars of 60,000 pounds capacity, 900 gondola cars of 100,000 pounds capacity and 100 dump cars of 80,000 pounds capacity, besides 15 mogul-type locomotives.

The Western Steel Car & Foundry Co. of Anniston, Ala., is reported to be working on orders for more than 1700 cars.

The Baltimore & Ohio Railroad has reserved space with the United States Steel Corporation for about 50,000 tons of rails for next year.

The Chesapeake & Ohio Railway is reported to have just received 500 steel gondola cars of 100,000 pounds capacity.

The Mississippi Central Railroad will, it is reported, buy two passenger cars, one compartment car and two combination baggage, mail and express cars.

The Harriman lines are reported to be in the market for from 4000 to 5000 steel underframe box cars of 100,000 pounds capacity, 250 steel underframe box cars of 80,000 pounds capacity, 500 all-steel gondola cars of 100,000 pounds capacity and 250 steel underframe flat cars of 80,000 pounds capacity.

The Norfolk & Western Railway has ordered one Shay locomotive from the Lima Locomotive & Machine Co.

Iron Mountain Work.

The Iron Mountain division of the Missouri Pacific Railway is said to be putting in about 25 passing sidings in Arkansas, five of which have been completed. The company is also receiving much new equipment, which will likewise greatly facilitate the traffic movement. Nearly 40 miles of track have been completed on the line from Antoine, Ark., toward Fort Smith, and the branch between Eudora, Ark., and Gilbert, La., has been finished as far as Calvit, 37½ miles. The Natchez and Western division has been converted to standard gauge.

The Iron Mountain is also reported to have put in service a movable blacksmith shop. The shop is established on a box car, which is taken from point to point wherever small repairs are necessary to switches, cross-overs or signals, which avoids sending damaged parts to the machine shops for repairs.

Norfolk & Southern Progress.

The land and industrial department of the Norfolk & Southern Railway Co. has issued a little book entitled "Cities of Opportunity in the South." It treats of a number of places along the lines of the company and presents many valuable facts concerning them, including data about their industrial and commercial features and also regarding the country surrounding them. The Norfolk & Southern is rapidly extending its lines, and this publication is of especial value in connection with this work. There is also a little folder called "Some Facts About Tidewater Virginia and Eastern North Carolina," which deals with the agricultural features of the region served by the railway and gives statistics therefrom. F. L. Merritt is land and industrial agent of the railroad at Norfolk, Va., and copies of these publications may be obtained from him.

Proposed New Coal Road.

The Fairmont & Southern Railroad Co. has been chartered in West Virginia to build a line from Belington, in that State, northward along the Tygart valley and the Monongahela valley to Pittsburg, about 225 miles. It will run via Grafton and Fairmont. The capital is nominally \$25,000, and the incorporators are John T. Williams of Baltimore, Benjamin F. Overholt of Scottsdale, Pa.; Ralph Overholt of Pittsburg, Charles F. Teter and Samuel A. Moore of Philippi, W. Va.; Charles E. Conaway and Waitman H. Conaway of Fairmont, W. Va.

A dispatch from Pittsburg says that this proposed railroad will open up a great deal of new coal territory, and that the Messrs. Overholt are cousins of Henry C. Frick, who is supposed to be interested.

Little Rock to Pine Bluff.

President J. J. Fiske of the Little Rock & Pine Bluff Traction Co., 501½ Main street, Little Rock, Ark., writes the MANUFACTURERS' RECORD that the company will now receive figures from railroad contractors upon the grading in sections of its proposed electric railway from Little Rock to Pine Bluff, Ark., about 50 miles. Estimates will also be received for bridges, track, overhead construction, power-house,

etc., besides for material such as wire, bridge steel, equipment, rolling stock, etc. The other officers of the company are W. H. Lankford, vice-president; J. W. M. Rose, secretary and treasurer. President Fiske is also general manager.

Cache Valley Deal.

A dispatch from Walnut Ridge, Ark., says that a syndicate headed by J. D. Goldman of St. Louis has bought the Cache Valley Railway, extending from Sedgewick to Light, Ark., and that it is intended to extend the line northward to Paragould and southward to Walnut Ridge or Newport. It is further stated that officers have been elected as follows: President, J. D. Goldman, St. Louis; first vice-president, Ad Bertig, Paragould; second vice-president, H. A. Culver; treasurer, S. C. Dowell; secretary and general manager, G. W. L. Brown, all of Walnut Ridge.

Chipley to Troy.

Mr. A. L. Kelley, president of the Alabama, Florida & Gulf Railroad Co., and also secretary and treasurer of the Morris Lumber Co., writes from Slocumb, Ala., to the MANUFACTURERS' RECORD that it is proposed to build the line from Chipley, Fla., to Troy, Ala., but not to Crowley, Ala. The route will be via Noma, Fla., and Slocumb and Enterprise, Ala.; principal office at Slocumb. The other officers of the railway are D. H. Morris, vice-president; C. E. Segrest, treasurer; W. W. Beall, secretary.

Construction to Begin.

The MANUFACTURERS' RECORD is informed that surveys have been completed by Pressey & Weller of Washington, D. C., for the Lyndhurst & Sherando Railroad (Virginia), and the contract for the construction has been let. The construction work will probably be begun within the next 30 days. This road will connect the property of the National Manganese Corporation with the Norfolk & Western Railroad at Lyndhurst, Va.

Railroad Notes.

The Southern Railway has appointed E. H. Craig to be commercial agent at Sheffield, Ala.

The St. Louis & San Francisco Railroad has broken ground at Sherman Texas, for its brick and stone shop buildings.

David Hill of Washington, N. C., is reported to have invented a ventilator for railroad cars by means of which each passenger can regulate the fresh-air supply for his own seat.

John J. Nelson, vice-president and general manager of the Louisiana Northwestern Railway, is reported as saying that the company is making extensive improvements and is also receiving new rolling stock.

The Texas Traction Co. is reported to have begun construction at McKinney, Texas, on the power-house brickwork, and that the building will be pushed to completion. Considerable grade has already been finished.

The Southern Railway Co. has given a test of an automatic train stop signal which was witnessed by members of the Interstate Commerce Commission. It is said that the train was automatically stopped when a danger signal was disregarded.

A statement of earnings of the Norfolk & Portsmouth Traction Co. shows that the gross earnings in July were \$274,017 and the net earnings were \$107,295. In July, 1906, the gross earnings were \$162,586 and the net earnings were \$54,192. For the seven months from January 1 to July 31 of this year the gross earnings

were \$1,374,198 and the net earnings were \$706,994. For the corresponding period of last year the gross earnings were \$957,573 and the net earnings were \$323,880.

Concerning the report that the Chicago, Burlington & Quincy Railroad Co. would build a line from Mexico to St. Joseph, Mo., Mr. T. E. Calvert, chief engineer, informs the MANUFACTURERS' RECORD that while the company is doing some surveying in that country, there is no immediate prospect of any construction being done.

Concerning the report that the Gulf, Colorado & Santa Fe Railway Co. had bought a terminal site in Port Arthur, Texas, and would build a line from Beaumont, an official of the company writes the MANUFACTURERS' RECORD that the report is without foundation, as the company has not purchased any such terminal site.

The fourth edition of the Jamestown Exposition booklet issued by the Chesapeake Steamship Co. has just been issued. There has been such a demand for this little guide that the company has found it necessary to give increased orders to its printers in order to supply the demand. Copies may be obtained from E. J. Chism, general passenger agent at Baltimore, Md.

The Wichita Valley Railway has registered in Texas \$137,000 of bonds, the Abilene & Northern has registered \$60,000 and the Wichita Falls & Oklahoma Railway has registered \$49,000. These roads are known as the Wichita Valley lines. Extensions have recently been building between Seymour and Abilene, Texas, and also northward from Wichita Falls to the Red river.

FOREIGN LETTERS

The MANUFACTURERS' RECORD is so widely read in foreign countries that we are in constant receipt of many letters from all parts of the world. Some of these letters indicate the disposition of foreigners to buy American goods, and are therefore of interest to our readers.

American Products for Guatemala.

B. M. Martin, 8 a Avenida Norte, No. 6, Guatemala:

"Machinery is employed here for sugarcane and coffee plantations. People able to sell machinery are the following: Olmacen de San Miguel, L. Capouillet, director; Olmacen El Cazador, Van de Putte y Cia; Van der Henst, Olmacen Holandes; Schutte y Cia, and Payens y Cia, all of Guatemala City. Regarding eatables, drinkables, clothing and household supplies, kindly send the manufacturers to me. I shall investigate and tell them what can be done. I think that many American products can be introduced here."

Embossing and Woodworking Machinery.

Fr. Gronarz, Landaustrasse 3, Cassel, Germany:

"I could find a market for the following special machinery, as the same is made in this country only to a limited extent: In-laying (embossing) presses for curved surfaces, wheel box, spoke and fellow machinery and barrel machinery."

Water Power Electrical Plant Planned

The Chickasha Water Power Co. of Chickasha, I. T., is now preparing to begin the construction of its water power electrical plant, which will transmit electricity for lighting and power from a point on the Washita river near Chickasha. Lawrence Martin, treasurer of the company, has advised the MANUFACTURERS' RECORD that he is prepared to correspond relative to the construction of the dam and the purchase of the water power and electrical machinery, wire, poles, cross-arms and other construction materials and equipment needed.

TEXTILES

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the MANUFACTURERS' RECORD. We shall be glad to have such matters at all times, and also to have any general discussion relating to cotton matters.

Electric Power for Cotton Mills.

It has been evident for several years to the most casual observer of the trend of developments in the manufacturing world that electricity is being more and more adopted for power purposes in all kinds of industrial plants. Managers of cotton mills have been notably active in installing electrical equipments, especially where the primal power is the flow of water. Many Southern cotton factories are now operated by electricity, and more now being constructed will use electricity for driving their machinery. For several months past the Southern Power Co. of Charlotte, N. C., has been making numerous contracts for electric power for cotton mills to be reached by its transmission of electricity from the various water-powers it is developing in North and South Carolina. This company's plans have been frequently referred to by the MANUFACTURERS' RECORD, and it will be recalled that eventually the company will be distributing more than 150,000 horse-power. The company has made contracts with 62 cotton-mill companies during the past several months, these plants having an aggregate of about 500,000 spindles. Of these plants there are 48 in North Carolina and 14 in South Carolina. Most of them are completed, about 150,000 spindles being the equipment of those now under construction. The mills are located in 25 different cities, and 31 are now using the Southern Power Co.'s electricity. The Southern Power Co. has also contracted to furnish electricity for lighting in nine cities.

New England Mill Men.

The program for the semi-annual meeting of the National Association of Cotton Manufacturers, to be held at Washington, D. C., October 3-4, will include papers on a few suggestions on merchandising the mill's product, American shipping on the deep seas, an analysis of usage, black is white, the customs administration colorblind, cotton manufacturing and the fire waste, economic position of the New York Cotton Exchange and its relation to the cotton trade, evolution of the lug strap, general questions of cotton-mill fires, inland transportation of cotton, loading and shipment of cotton, present and future conditions of cotton productions and manufacture in the United States, tests in cotton mills and use and abuse of warp stop-motions and other automatic appliances on power looms. This meeting at Washington of the association, which was formerly the New England Cotton Manufacturers' Association, will be a feature of the visit to this country and the trip through the South of about 200 representatives of the European cotton-manufacturing interests.

The Shaw Cotton Mills.

The MANUFACTURERS' RECORD has been advised as to particulars of the Shaw Cotton Mills of Weldon, N. C., mentioned last week as effecting organization. This new company has decided on the installation of 5129 frame spindles with accompanying apparatus for the manufacture of two-ply yarns, Nos. 24 to 36, and contract for this machinery has been awarded to the Mason Machine Works of Taunton, Mass., which

company will furnish the engineer in charge. The mill building will be constructed of brick, two stories high, 50x150 feet, and is expected to be completed and ready for the equipment by January 1. A gas engine and gas producer will be used for power, contract being about concluded. The Shaw Cotton Mills is capitalized at \$100,000, and W. T. Shaw is president and general manager. Other officers and directors are as stated last week.

Aberfoyle Mills Corporation.

The Aberfoyle Mills Corporation has been incorporated with a capital stock of \$1,600,000, and an application to increase capital stock will be made when actual requirements are definitely known. William T. Galey is president; Charles E. Lord, vice-president; Kenneth Lord, treasurer, and John P. Wood, secretary. They and W. C. Houston, Robert Wetherill, W. S. Blakely, John McGill and Thomas S. Brown are the directors; offices at 65 Worth street, New York.

This corporation acquires either the whole or controlling interest in several mills, among which are the Aberfoyle Manufacturing Co., the Galey & Lord Manufacturing Co. and the Arasapha (Jordan) Manufacturing Co., each of Chester, Pa., and the Hope Mills Manufacturing Co. of Hope Mills, N. C.

Oconee Knitting Mills.

The Oconee Knitting Mill of Walhalla, S. C., will double its present equipment of machinery in connection with increase of capital stock from \$15,000 to \$30,000, which was referred to last week. The company will add 26 knitting machines, 25 of these to knit half-hose and all the other machines to knit full hose. Contracts have been awarded for the new equipment, and when it is in position the mill will have a daily capacity of 500 dozen pairs, employing from 85 to 100 operatives. The company contemplates building a mill and installing spindles for the production of the yarns it consumes in its knitting plant. Mr. James M. Moss is treasurer of the company.

The Leesville Cotton Mills.

The Leesville Cotton Mills of Leesville, S. C., has been incorporated with a capital stock of \$100,000 and will at once build a cotton factory, construction to begin during September. The company's officers are: President and treasurer, R. B. Jennings of Columbia, S. C.; vice-president, J. R. Bouknight of Leesville; secretary, W. G. Duncan, also of Leesville. Among the incorporators are Messrs. G. E. Shand of Columbia, F. H. Hendrix, J. L. Matthews and C. D. Barr of Leesville.

To Manufacture Yarns.

A meeting of business men was held at Randleman, N. C., last week to consider plans for organizing a company to build a cotton mill, and a capital stock of \$100,000 was subscribed. A building has been secured and arrangements will be made for installation of machinery to manufacture hosiery and warp yarns. The People's Savings, Loan & Trust Co. can probably give information until organization is effected.

To Rebuild Burned Plant.

It is stated that the management of the Tuscaloosa Cotton Mills of Tuscaloosa, Ala., is preparing to rebuild that company's plant, which was destroyed by fire several weeks ago. The loss was \$300,000, according to press dispatches, but the knitting plant of the company was not damaged. There were 20,000 spindles and 400 looms in the burned plant. Mr. D. L. Rosenau is the company's president.

To Manufacture Print Cloths.

Mr. John A. Betjeman and associates of Albany, Ga., propose organizing a cotton-mill company, as reported last week by the MANUFACTURERS' RECORD. They will effect permanent organization with a capital stock of \$200,000, and plan to build a plant of 10,000 spindles and 300 looms for the manufacture of print cotton cloths. All details are expected to be determined by October 1.

Radford Knitting Mills.

The Radford Knitting Mills has been incorporated at Radford, Va., with a capital stock of \$20,000 and privilege of increasing to \$50,000. The company's officers are: President, W. B. Jordan; vice-president, J. M. Senner, both of Radford, and secretary-treasurer, W. H. Galway of East Radford.

Mumford Cotton Mills.

The Mumford Cotton Mills of Talladega, Ala., has been incorporated with a capital stock of \$50,000 by Messrs. B. F. Camp, N. C. Camp, D. B. Harris, F. F. Newman and E. N. King.

Textile Notes.

The Watauga Hosiery Mills of Johnson City, Tenn., has increased capital stock from \$10,000 to \$20,000.

Mr. C. E. Hallman of Oakwood, S. C., will establish a knitting mill to be operated by water-power transmitted direct.

The Weatherford (Texas) Cotton Mills contemplates doubling present equipment of 4800 spindles, manufacturing yarns.

The Stony Point (N. C.) Manufacturing Co. is reported as to add 1000 spindles to its present equipment of 3000 spindles.

Mr. J. A. J. Henderson and associates of Ocilla, Ga., propose organizing company to build a cotton mill; \$60,000 has been subscribed.

Messrs. Wm. H. Coyle, Jack Tearney and associates will form company to establish mill for manufacturing cotton duck and other similar cloth at Guthrie, O. T.

The Topsy Hosiery Mills of Columbus, Ga., will not build an addition, as was reported last week, but will add about 50 knitting machines to present equipment.

The Perkins Hosiery Mills of Columbus, Ga., will add about 80 knitting machines to present equipment. It is understood that the company has closed contracts for the new machinery and received a portion of it.

Mr. R. M. Miller, Jr., of Richmond, Va., bid in the Whetstone Cotton Mills of Bessemer City, N. C., at the sale held last week. His bid was \$16,000, and is subject to the confirmation of court. There are 50 looms in the mill.

Mr. J. H. Mayes of Charlotte, N. C., bid in the Vermont Cotton Mills of Bessemer City, N. C., at \$60,000 at the sale held last week. This bid is subject to the confirmation of court. There are 5000 spindles and 96 looms in the plant.

The Green River Manufacturing Co., J. O. Bell, secretary-treasurer, will build at Zirconia, N. C., the cotton mill noted last week in connection with Mr. Bell's name. The MANUFACTURERS' RECORD has previously given full particulars of this 7500-spindle plant.

Mr. Richard M. Eames, Jr., of Salisbury, N. C., is reported as negotiating with Pennsylvania capitalists relative to the organization of a company to build a large cotton factory at New London, N. C., the motive power to be electricity purchased from the Whitney Company of Whitney, N. C.

MINING

Phosphate in 1906.

Of the 2,080,957 long tons of phosphate marketed in the United States in 1906 (valued at \$8,579,437), Florida produced 1,304,505 long tons, valued at \$5,585,578; the Tennessee production was 547,677 long tons, valued at \$2,147,991, and South Carolina's production amounted to 223,675 long tons, valued at \$817,068. Other States, including Arkansas and Idaho, produced 5100 tons, valued at \$28,800.

The statistics of production collected by the United States Geological Survey in recent years indicate that the demand for the material has made more rapid strides than the output, and the tendency of the price per ton has been upward. Under these conditions of growing demand and higher prices it is therefore not improbable that many low-grade deposits which it has hitherto been impracticable to utilize may be profitably worked.

A bed of blue phosphate rock recently discovered in Western Putnam county, Tennessee, on the eastern flank of the Nashville dome, or on the side opposite the older phosphate fields, bids fair to be of commercial importance, and recent prospecting has discovered a number of workable deposits in Utah, Wyoming and Idaho. In Idaho phosphate mining has been begun on a considerable scale in the vicinity of Montpelier, the ore being shipped to Martinez, Cal. The Arkansas deposits are found along Lafferty creek, in Western Independence county, and although worked at a single point, they extend for some distance in an east-west direction, reaching from Hickory valley, 10 miles northeast of Batesville, westward to St. Joe, in Searcy county, or beyond.

Cement in 1906.

Of 51,000,445 barrels of cement, valued at \$55,022,277, produced in this country in 1906, 46,463,422 barrels, valued at \$52,466,186, were of Portland cement. Referring to the phenomenal growth of the Portland-cement industry, the United States Geological Survey says:

"Twenty years ago, when the Portland-cement output of the entire United States stood at about 250,000 barrels, against nearly 7,000,000 barrels of natural cement, the first attempt was made to introduce the rotary kiln for the manufacture of Portland, the company exploiting the new process proudly claiming the ability to produce 30,000 barrels of cement per annum, and to triple this quantity as soon as the necessary grinding machinery should be added. Today it is not considered in the least sensational if a company announces the capacity of its plant at 3000 to 5000 barrels a day, while the yearly production of the large plants runs well into the millions of barrels."

New Coal Field.

One of the latest companies to begin operations in the new coal field in Kentucky, on the Chenoa branch of the Louisville & Nashville Railroad, is the Chenoa Coal Co., which is reported to have installed a mining plant at a cost of about \$30,000. It is understood that this company was organized to develop about 800 acres of lands in the new district held under lease by the Excelsior Coal Co. of Middlesboro, Ky. Mr. Clyde Miller of Middlesboro is the general manager of the Chenoa Coal Co., and is in active charge of operations.

Will Develop Slate.

The James River Slate Co. of New Haven has incorporated at Hartford, Conn., to develop slate quarries in Virginia. The company is capitalized at \$50,000, and is reported to have purchased

about 200 acres of land near New Canton, in Buckingham county. Its incorporators are Messrs. Charles J. Anderson of New Haven, Conn.; John T. McKeena, New Canton, Va.; C. C. Farinholt of Richmond, Va., and Hugh L. Kirby of New York city.

To Erect Barytes Mill.

A dispatch from Danville, Ky., announces the purpose of Burton H. Vance of Louisville, with New York, Cincinnati and Lexington (Ky.) capitalists, to erect a barytes mill in Danville to cost about \$100,000. It is stated that 50,000 acres of barytes-producing lands have been leased in that vicinity and work has already begun for developing the mines.

Punta Gorda Shipments.

Shipments of Peace River phosphate rock made by the Peace River Phosphate Mining Co. through the port of Punta Gorda, Fla., during August amounted to 3250 tons, making a total for 1907 of 28,419 tons.

In 1906 Maryland produced 5,435,453 short tons of coal, an increase over the production in 1905 of 326,914 tons.

Southern Demand for Electric Power.

The MANUFACTURERS' RECORD has frequently referred to the Southern Power Co. of Charlotte, N. C., and its extensive water-power-electrical developments in North and South Carolina. While in Charlotte last week Dr. W. Gill Wylie of New York, the company's president, was quoted by the *Charlotte News* as follows:

"If interest and depreciation on cost of steam plant be added to the cost of coal and cost of labor, the average cost of power in this district would be in the neighborhood of \$34 per horse-power per year. In order to make this figure comparable with cost of electric power, the cost of the friction of the additional shafting necessary in steam-driven plants must be added to this \$34 per horse-power per year. Mill engineers in this section estimate this friction at about 18 per cent., which would bring up the total cost of power delivered at the machine \$40 per horse-power per year.

"The Southern Power Co. is selling this power for \$20 a horse-power year, which is only half of the cost that the millowner is paying for power today. To get some idea of what this means in round numbers to North and South Carolina, we will estimate the total horse-power of the mills at 200,000, for which the millowners have been paying \$8,000,000, but with power at \$20 a horse-power year it will only cost them \$4,000,000, a net saving of \$4,000,000 annually to North and South Carolina, which will help vastly in the competition against Northern mills.

"It is impossible for the Southern Power Co. to develop power quickly enough for the demand.

"The 45,000 horse-power of the Catawba and Great Falls stations has already been contracted for, and there is hardly a day that we are not called upon for more power. It is for this reason that we are employing all the men that can be advantageously worked at Rocky Creek. The output of this plant will be double that of Ninety-Nine Islands, on the Broad river, and further, its convenient situation and accessibility lends itself to rapid construction. When this plant is completed we believe that its output will in a measure help us to supply the demand and give us time to develop the smaller powers at Fishing Creek, Wateree, etc., which in all totals about 150,000 horse-power."

The Texas and Louisiana Commercial Secretaries' Association decided at its Fort Worth meeting to meet next June at Galveston.

LUMBER

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

Wood Vulcanizing a Success.

Recent experiments in wood vulcanizing, which have been conducted by the National Wood Vulcanizing Co. of the United States, employing the Howard patent, said to be owned by Capt. D. G. Purse of Savannah, Ga., and Prof. J. H. Woolson of Columbia University, New York city, are reported as producing satisfactory results. It is stated that experiments were made with tupelo gum, cypress and loblolly pine, of which the worst specimens were used. In the tests with tupelo gum this product, which is considered almost useless for general purposes, is said to have been subjected to the vulcanizing treatment for a period of 26 hours, rendering it hard and dry and of great crushing and tensile strength. Similar tests were made with cypress, and in 29½ hours cypress boards one, two and three inches thick were converted into good lumber, hard and durable, proof against warping and suitable for many purposes.

By actual tests in the laboratories at Columbia University it is stated that unvulcanized pine was crushed and splintered at 20,000 pounds, whereas the vulcanized pine was not much broken at a pressure of 56,000 pounds. In testing for the tensile strength it was found that both the vulcanized and unvulcanized pine broke when subjected to a pressure between 7000 and 8000 pounds, both breaking on a knot. The process as used consists of a cylinder, in which the drying is done. In this the wood is placed and the cylinder sealed. The temperature is then raised until the cylinder gauges indicate that the moisture has been exhausted, when the temperature is doubled. The drying out of the cypress showed a reduction in weight of about 42 per cent., while the tupelo gum in some instances was reduced about 46 per cent. For the practical application of the process it is planned to place cylinders with capacities of from 5000 to 20,000 feet at points of vantage in the lumber districts. Capt. D. G. Purse, who will be at the Marlborough Hotel in New York for 30 days, will superintend the location of plants in the South.

Big Cypress Development.

The development of about 200,000,000 feet of cypress timber in Louisiana is contemplated by the Vacherie Cypress Co. of Vacherie, La., which has recently organized with a capital stock of \$600,000. The property is located in Ascension, St. James and Lafourche parishes, the timber rights being purchased from the Miles Timber Co. It is the intention of the Vacherie Cypress Co. to erect a sawmill and planing mill at Vacherie, together with tramroads, commissary, log pond, pipe line, residences and cottages for the use of its employees. The sawmill will be equipped with a nine-foot band saw and a six-foot pony band, to have a capacity of from 65,000 to 70,000 feet of lumber per day. The planing mill, it is stated, will be equipped with modern machinery and so arranged as to handle any increased production of the sawmill. It is understood that the company will purchase 40 logging cars and two locomotives, beside one mile of cast-iron pipe for the construction of a feed-pipe line from the Mississippi river to the log pond of the sawmill. The tramroad will be standard gauge. Orders have been given to the Allis-Chalmers Company of Milwaukee, Wis., for the mill machinery, to the Erie City Iron Works of Erie, Pa., for the boilers, and to the Lidgerwood Manufacturing Co. of New York city for skidders.

Messrs. John Sherman Hoyt, 1 Broadway; W. H. Woodin and F. L. Slade, all of New York, are interested in the enterprise, and W. H. Martz, Hibernia Bank Building, New Orleans, La., is the general manager of the company. The plant is expected to be in operation by April 1, 1908.

Box Shooks Wanted.

The Woodstock Hardwood & Spool Manufacturing Co., Charleston, S. C., is in the market for large quantities of box shoos. Manufacturers are invited to correspond.

Finished Table Legs.

The B. M. Root Company of York, Pa., wants addresses of manufacturers offering finished table legs ready for the table manufacturer.

Whitney Dam Completed.

An interesting announcement of the week was the completion of the Whitney Company's dam at Whitney, N. C. The MANUFACTURERS' RECORD has previously presented full particulars regarding this water-power-electrical enterprise, which will develop 76,000 horse-power for transmission by electricity to cities within a radius of 75 miles. The dam is 960 feet long and 46 feet wide. The accompanying canal, now being built, will extend to the Narrows of the Yadkin river, four and one-half miles distant. This canal has a minimum depth of 18 feet and a maximum of 82 feet, with a decline of 130 feet for its entire length. Construction of the power-house at the Narrows and of the pole line for transmission wires will be begun soon. There will be two developments, 40,000 and 36,000 horse-power, respectively, the larger one being provided by the dam just completed. In connection with this development the company is surveying 600 acres of land for an industrial city and 500 acres on the river as sites for manufacturing plants. Mr. Geo. I. Whitney of Pittsburg, Pa., is president of the company, which will invest over \$7,000,000.

Contracts for Water-Power-Electric Plant.

Several weeks ago the MANUFACTURERS' RECORD mentioned the invitation for proposals for construction and for machinery for the Water Power Electric Co.'s proposed plant near Hickory, N. C., of which particulars had previously been stated. Last week the company awarded contract for building the dam to A. F. Hart of Hickory, construction to be completed by January; contract for electrical apparatus to the General Electric Co. of Schenectady, N. Y., and contract for turbine wheels to the Dayton Globe Iron Works Co. of Dayton, Ohio. The dam is designed to develop 5000 horse-power, 3000 horse-power to be the initial amount for transmission by electricity. Mr. M. E. Thornton of Hickory is president of the Water Power Electric Co., and C. S. Wenger of Brownstown, Pa., is the engineer in charge.

Plans for Portland-Cement Plant.

Plans are being prepared by W. A. Tyrrell of 620 Chestnut street, St. Louis, Mo., for the Continental Portland Cement Co.'s proposed plant. It is understood that more than \$1,000,000 will be expended for erection of buildings and installation of machinery, including three structures, 96x100, 75x400 and 96x234 feet, one and two stories high; to be of frame, sheet and structural iron, with corrugated-iron roofing, and equipped for lighting by electricity. The Continental Portland Cement Co. was incorporated in June with a capital stock of \$3,500,000, and D. A. Marks is president; offices in the Benoist Building.

MECHANICAL

The Hamilton Storage Machine.

For years most staple commodities have been systematically stored and rehandled from storage, with one exception. Bituminous coal is still unloaded directly from railway car into delivery wagon or boiler-room.

The general adoption of the storage system for bituminous coal greatly improves present facilities by providing for storage and rehandling the coal; that is, of a proportion large enough to act as a safe reserve and to secure to the railways and the public the certainty of fuel when it is needed.

While the arguments in favor of central storage are granted by the fuel distributors of the country, the elaborate and costly installations that would be required are counter arguments of great weight.

Railroads have hesitated to cover yards with structural iron work where these very structures limit the storage to the space covered. Such a yard has to be built for the maximum storage required, and even when used to that maximum capacity the interest on the first cost and the charges for depreciation in many cases offset the convenience of the storage system and the saving effected in the handling of the material.

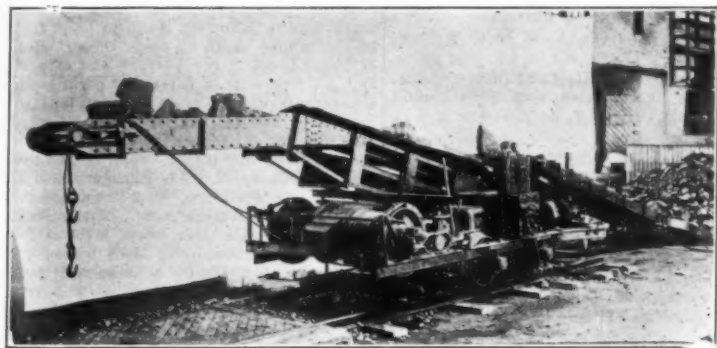
The United States Steel Corporation will shortly install in its storage yards at Gary, Ind., the Hamilton machine (illus-

that is so necessary where large amounts of material are to be handled quickly into and out of storage.

The storage machine is a development of the pit-car loader made by the Hamilton Manufacturing Co. of Columbus, Ohio. The principles involved are identical; the dimensions, however, are very different. Where one machine has all outdoors in which to work, the other does its loading in the dark, in space restricted in all directions, picking up from the mine floor material that is massed and jammed into a close pile. The pit-car loader occupies only 42 inches of head space, works in 48-inch veins and mechanically picks up run-of-mine coal at the rate of 1000 pounds per minute. The company will build machines having capacities between the limits of these two machines.

Those who have been in mines and who know the present methods of producing coal will appreciate what this machine does.

After the coal has been undercut by any of the various types of undercutting machines in common use at present, the coal is drilled and shot down, then this loading machine, which is self-propelled, moves into the room. The pony truck carrying the front end is removed and the posts for the feed chain are set up at each side of the room. The nose end then rests on the floor at the edge of the coal. The pit car to be loaded is placed under the delivery conveyor and the sweep is started in its



THE HAMILTON STORAGE MACHINE.

trated herewith) for handling coal and coke into and out of storage, that seems to answer the objections as to first cost and flexibility that are commonly brought against storage systems for bituminous coal.

The machine picks up loose material from any part of a storage yard 100 feet wide and of any desired length—1000 to 10,000 feet. It both stocks the material as high as 40 feet and reloads it from the stock pile into the railway car when the material is to be moved. In both these operations it has a capacity of six tons a minute. The cost of rehandling coal and coke is less than two cents a ton, and as the machine requires no overhead structure (or, indeed, any construction besides the platform on which it operates), its first cost as well as the cost of maintenance is very low.

In operation the machine does not leave its 18-foot track, the radial sweep reaching out 50 feet from the vertical headshaft, while the flights of the conveyor pick up and carry on to the delivery conveyor the material lying in the path of the gathering plate.

As the whole machine moves forward and back by its own power, and as both the gathering and the delivery conveyor are capable of swinging in a circle about the machine center, coal may be picked up from any point of the platform and delivered to any point within the limit of the delivery conveyor.

The various movements described give the flexibility of operation to the machine

movement from right to left and from left to right across the room. The gathering flights pick up the coal that gathers on the nose plate and convey it to the steel belt conveyor, which delivers it into the car.

To show the increased capacity of the conveying method of loading over shovels or scoops and grab buckets, when the pile is five feet high there is seven feet of coal falling into the machine for each square foot of floor space traversed by the sweep. The coal rolls down into the path of the gathering nose, the breakage being the smallest possible. When the nose is four feet long the sweep need not move faster than two feet per minute across the floor to enable the machine to gather and load a ton of coal per minute in a continuous stream.

When the cars are very large and heavy it is desirable to equip the pit-car loader with reels and rope to handle the loaded cars and empties from the face of the room to the cross entry, where the motor can take them to the bottom—the machine is so equipped.

The Hamilton Manufacturing Co. will build machines having capacities from 1000 to 12,000 pounds per minute, the latter for storage and rehandling.

Electroless Pipe Covering.

Those who are acquainted with the damage caused by electrolysis will be interested in the accompanying illustration of the electroless pipe covering. The manufacture of this covering is a direct result

of the demand for a preventive of electrolysis. This pipe covering is a sectional covering of a specially-prepared asbestos paper in laminated form, thoroughly impregnated and coated with a high-grade waterproof insulating compound, which presents an effective barrier to the transmission of electric current. Electroless pipe covering acts as an insulating medium between the pipe and ground, and, being made of indestructible materials, is permanently durable and has a lasting efficiency. It is one-quarter to three-eighths inch thick, and is furnished in three-foot sections to fit various sizes of iron and lead pipes. All longitudinal and abutting joints are securely sealed by means of strips and insulating cement, which are



THE ELECTROLESS PIPE COVERING.

furnished with the covering. For sleeve couplings, etc., a special sleeve is provided.

This covering is made by the H. W. Johns-Manville Company of 100 William street, New York.

"Trussit" Metal for Reinforcing.

The advantages of a reinforced concrete roof are generally recognized. Such a roof is fireproof; it has no joints or seams, and therefore is not affected by extremes of weather, and acid fumes such as frequently arise in manufacturing processes do not cause it to deteriorate. The disadvantages heretofore in connection with reinforced concrete roofs has been that such roofs, when reinforced with some metals and rods, have of necessity been very heavy. They, of course, require, as

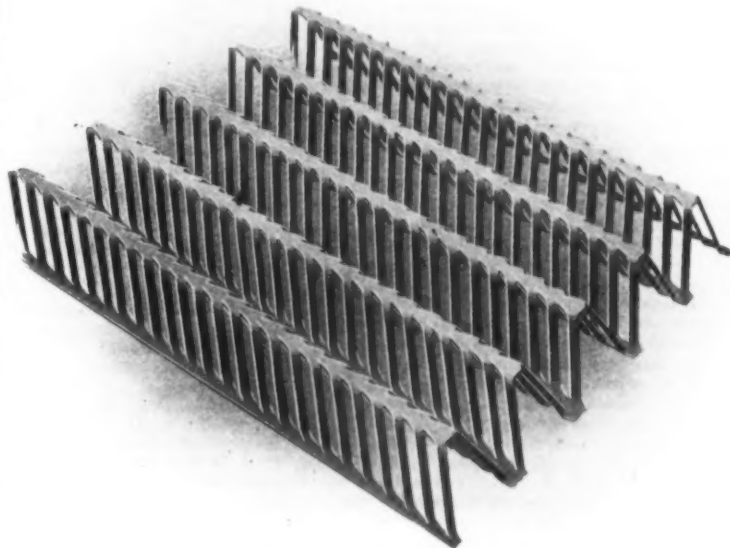
the trussed formation of the steel. The result is a light reinforced concrete slab tremendously strong in proportion to its weight. In a report of tests of four slabs reinforced with "Trussit" metal and with "Trussit" and our cold twisted lug bars, slab No. 1 tested to destruction and went down under a load of 464 pounds per square foot. This slab was one and three-fifths gravel concrete and was one and seven-eighths inches thick. Inasmuch as snow load on a roof is figured as 35 pounds per square foot, this indicates how light a slab will meet all roofing requirements. The effect of this light slab is to permit a considerable saving in the steel of the roof trusses and purlins.

"The usual practice is to erect 'Trussit'

on four-foot centers, and it may be attached to the purlins either by bolts, wire or clips.

"There are quite a variety of methods of waterproofing a 'Trussit' roof, and any of them that are satisfactory for use on reinforced concrete roofs work equally well with the 'Trussit' roof. Our engineers have made a study of the erection of 'Trussit' roofs, and of waterproofing them, and they are willing to go into this subject at length with those persons who desire the information.

"'Trussit' also has been used with excellent results for the erection of solid partitions without the use of studding; that is, temporary studding is used to sustain the metal until one coat of plaster has been applied, then the studding is removed and the plastering completed. The



"TRUSSIT" METAL FOR REINFORCING.

do all other forms of concrete construction, centering for their erection, entailing considerable expense.

It was to meet the demand for an absolutely fireproof roof which should be light, cheap and strong that the General Fireproofing Co. has developed "Trussit" reinforcement. (See accompanying illustration of the new product.) Describing this product the manufacturer says:

"'Trussit' is expanded from light steel and trussed. It is erected on four-foot centers and is plastered on both sides. 'Trussit' does not separate the upper and under coats of the concrete into two layers; in fact, there are no upper and under coats, except as these terms might indicate the method of application. The concrete keys through the mesh of the 'Trussit,' completely enveloping it and sustaining

result is a very rigid wall and at the same time an extremely light one. This material comes in sheets, the stock size of which is 15½x96 inches, but 4, 5, 6 and 7-foot lengths may be had at a slight increase in cost."

The General Fireproofing Co. is of Youngstown, Ohio.

To Interest Northern Capitalists.

The MANUFACTURERS' RECORD is advised that M. Muhle of Laurel, Miss., and associates are planning the organization of a company with capital stock of \$800,000 to establish a plant for the manufacture of paper and pulp in the South. They intend to interest Northern capitalists in the enterprise, but have not completed arrangements for representation in this connection.

Construction Department

TO OUR READERS!

In order to understand and follow up properly the Construction Department items, please bear in mind the following statements:

EXPLANATORY

The MANUFACTURERS' RECORD seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

* Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery, Proposals and Supplies Wanted."

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the MANUFACTURERS' RECORD.

ADDRESS FULLY

To insure prompt delivery of communications about items reported in these columns, the name of one or more incorporators of a newly incorporated enterprise should be shown on the letter addressed to that town, or to the town of the individual sought, as may be shown in the item, as sometimes a communication merely addressed in the corporate or official name of a newly established company or enterprise cannot be delivered by the postmaster. This will help to insure prompt delivery of your communication, although it is inevitable that some failures on the part of the postal authorities to deliver mail to new concerns will occur.

WRITE DIRECTLY

It is suggested to advertisers and readers that in communicating with individuals and firms reported in these columns, a letter written specifically about the matter reported is likely to receive quicker and surer attention than a mere circular.

BRIDGES, CULVERTS, VIADUCTS

Baltimore, Md.—Plans will be submitted to Mayor J. Barry Mahool, City Hall, within a few days for proposed concrete bridge to be erected over Gwynn's falls at Edmondson avenue. Structure will cost about \$300,000; B. T. Fendall, City Engineer, City Hall.

Campbellsville, Miss.—Board of County Commissioners, S. S. Griffin, clerk, will open bids September 2 for constructing bridges.

Decatur, Ala.—Southern Railway is reported to build new bridge on old piers across Tennessee river near Decatur; D. W. Lum, Washington, D. C., chief engineer.

East Bend, N. C.—Yadkin River Bridge Co. incorporated with \$15,000 capital stock by T. A. Steetman, W. A. Martin and J. J. Erwin to build and operate toll bridge over Yadkin river.

Fort Myer, Va.—Contract will be awarded September 9 for constructing reinforced concrete bridge on Military road to Fort Myer; Major M. Gray Zalinski, Quartermaster, U. S. Army, Washington, D. C.*

Greenville, Miss.—Board of County Supervisors, T. H. Hood, clerk, will open bids September 2 for constructing bridge across Tupper bayou.

Guthrie, O. T.—City has voted \$10,000 of bonds for bridging Cottonwood avenue on 6th and 9th streets, etc. (See item under "Water-works.") Address The Mayor.

Humble, Texas.—Harris county will build steel bridge over the San Jacinto river at Humble. Bids will be opened September 11; A. E. Amerman, County Judge; John B. Ashe, County Auditor, both of Houston, Texas.*

Memphis, Tenn.—City will construct reinforced-concrete deck for Madison-avenue bridge over Bayou Gayoso. Contract will be awarded September 5; J. T. Walsh, acting Mayor; Ennis M. Douglass, City Register.*

Meridian, Texas.—City has issued \$8000 of bonds to build bridges, culverts and improve streets. Contracts for erection of bridge,

50 feet long and 30 feet wide, with two four-foot sidewalks, on Main street and for several smaller bridges have already been awarded. Address The Mayor.

Natchez, Miss.—James S. Fleming will open bids September 3 for constructing two steel bridges—one over 2d street at Old Jersey ford and other over Meablin's creek at Washington and Palestine roads.

Sherman, Texas.—City will construct steel bridge; 16-foot roadway; total length, 75 feet; bids will be opened September 16; C. E. Craycroft, Mayor.*

COAL MINES AND COKE OVENS

Big Stone Gap, Va.—Blackwood Land Co. incorporated with \$800,000 authorized capital stock to develop coal and mineral land by R. T. Irvin, A. K. Morrison and James E. Mears.

Clarksburg, W. Va.—Monroe Colliery Co. incorporated with \$50,000 capital stock by Sylvester E. Moore, Benjamin H. Moore, Toney Harrison and others.

Crockett, Texas.—Houston County Coal & Manufacturing Co. will increase output of its lignite mines in Houston county, producing daily 250 tons of lignite. It is understood that 50 new 1½ ton mining cars have been ordered. Capacity of its Bear Grass mine in Leon county, producing 150 tons daily, will also be increased.

Frostburg, Md.—George's Creek Basin Coal Co., A. L. House, New York, N. Y., president, (formerly Cumberland Basin Coal Co.) will develop coal mines at Short Gap. It is expected that operations will begin by September 15. S. E. Orebaugh, in charge, is understood to be in Frostburg at present.

Middlesboro, Ky.—Excelsior Coal Co., owning mine leases on 800 acres of coal land near Middlesboro, has completed installation of \$30,000 plant for new mines, and will transfer large portion of Excelsior mine equipment to the new operation. Company has formed the Chenoa Coal Co., with Clyde Miller as general manager.

Mortons Gap, Ky.—Kington Coal Co. is preparing to develop its coal properties and will mine from 1500 to 1600 tons daily. Details of machinery have been decided. W. W. Kington is president and O. M. Kington secretary.

New Cumberland, W. Va.—The E. W. Maryland Co. incorporated with \$50,000 capital stock to develop coal and oil properties.

Richwood, W. Va.—Laurel Manufacturing Co., Fenwick, W. Va., will develop coal mines near Richwood. Company will build at once 100 coke ovens, intending to engage exclusively in coke manufacture.

Richwood, W. Va.—Cherry Boom & Lumber Co., owning 150,000 acres of land near Richwood, is developing coal mines for its own use.

Rockwood, Tenn.—Lone Mountain Coal & Lumber Co., lately reported incorporated with capital stock of \$50,000, owns about 2500 acres of coal and timber land, said to contain four workable veins of coal and large quantities of hardwood, principally oak and poplar. This property is to be leased to others for development. John Molyneux is president, T. A. Wright vice-president, J. E. Fox secretary-treasurer and A. T. Daniels general manager. (Company's title incorrectly noted lately.)

Somerset, Ky.—James Sheldon & Co. of Worley, Ky., have leased and will develop 600 acres of coal land; will install air compressor, aerial haulage and other machinery.

St. Louis, Mo.—Mississippi Valley Fuel Co. incorporated with \$25,000 capital stock by Joseph G. Buckman, Joseph B. Kreilkemeier and Joseph Kreilkemeier.

Walnut Cove, N. C.—W. T. Brown of Winston, Salem, N. C., and William Cook of Walnut Cove propose to develop coal mines. Investing \$50,000.

COTTON GINS

Anna, Texas.—Farmers & Merchants' Gin & Mill Co. incorporated with \$6000 capital stock by Andrew Pair, Luther Pair and M. C. Dorset.

Bowie, Texas.—C. H. Boedecker and associates have purchased the Bowie Cotton Oil & Gin Co.'s property, including system of cotton gins. New company has been organized with \$175,000 capital stock and the following officers: C. H. Boedecker of Bowie, president; E. P. Bomar, Gainesville, Texas, and Sidney Webb, Bellevue, Texas, vice-pres-

idents; L. C. Gibbon, secretary, and Ras Saufley, general manager, both of Bowie.

Callison, S. C.—Callison Farmers' Union has organized stock company with J. C. Rush president and A. W. Rogers secretary-treasurer to establish co-operative cotton gin.

Elberton, Ga.—Farmers' Gin Co. incorporated with \$5000 capital stock by R. S. Gaines, J. T. Maxwell, W. T. Dickerson, W. J. Eavenson and others.

Frisbee (P. O. White Oak), Mo.—Frisbee Cotton Gin Co. incorporated with \$5300 capital stock by J. W. Thomason, C. M. Pritchard, J. P. Pressler and others.

Lizelle, Ga.—A. B. Van Valkenburgh is building cotton gin.

Maramac, O. T.—R. C. Jones Cotton Co., recently reported incorporated with \$25,000 capital stock, will establish cotton gin; will also buy and sell cotton; managing officers, R. C. Jones of Maramac and S. A. Bryant of Cleveland, O. T.

Paragould, Ark.—Farmers' Union Gin & Milling Co., recently reported incorporated with \$12,000 capital stock, is erecting cotton gin, to consist of four buildings—gin-house, mill, cotton-house, cottonseed-house, and probably a warehouse. Equipment will include 40-bale gin and 1000-bushel-capacity corn mill; A. S. Snowden, president.

Refugio, Texas.—Refugio Gin & Milling Co. incorporated with \$5000 capital stock by T. M. O'Connor, J. M. O'Brien and J. E. Fox.

Sugden, I. T.—Farmers' Union Gin Co. will build cotton gin; ginhouse, 20x64 feet; engine-house, 20x32 feet; cotton-house, 20x40 feet; seedhouse, 30x40 feet; all buildings ironclad and to cost \$2500; ginning equipment to cost \$5000 and have daily capacity of 60 bales of cotton. C. E. Yoder is manager.

Victoria, Texas.—Mariana Milling and Ginning Co. incorporated with \$7500 capital stock by A. M. and J. A. McFaddin and D. L. Phelps.

ELECTRIC-LIGHT AND POWER PLANTS

Berlin, Md.—City is prepared to grant franchise for electric-light and water plant. Orlando Harrison is Mayor.

Charleston, S. C.—City will award contract November 15 for lighting streets and public buildings for term of one, two or four years with electricity, gas or some other equivalent illuminating power. Estimated requirements, 500 arc lights; gas to have five-foot burners; Ion Simons, City Electrician; R. M. Masters, chairman Committee on Lighting.*

Chickasha, I. T.—Chickasha Water-Power Co. is now ready to begin the construction of its proposed electric-light and power plant; will build dam on Washita river near Chickasha and transmit electricity to this city. Lawrence Martin, treasurer, is prepared to correspond with dam contractors, manufacturers of electrical and water-power machinery, poles, crossarms, etc.*

Citronelle, Ala.—Citronelle Light & Power Co. incorporated with \$25,000 capital stock to build and operate electric-light and power plant; J. A. Shannon, president; S. E. Shannon, secretary-treasurer.

Columbiana, Ala.—T. Gordon is planning erection of electric-light plant. (See item under "Water-works.")

Ferris, Texas.—Ferris Light & Power Co. incorporated with \$4000 capital stock by W. W. Batchelor, C. A. Weatherford, J. S. Wilson and others.

Handley, Texas.—Northern Texas Traction Co., H. T. Edgar, general manager, Fort Worth, Texas, will double capacity of power-house, expending about \$150,000.

Hartselle, Ala.—J. C. Rogers is interested in a plan to establish electric-light plant.

Hickory, N. C.—The Water Power Electric Co. has awarded contract to A. F. Hart for construction of dam, to be completed by January, for developing 5000 horse-power for transmission by electricity, 3000 horse-power to be distributed at first. Reported that contract has been awarded to General Electric Co. of Schenectady, N. Y., for electrical apparatus and to Dayton Globe Iron Works Co. of Dayton, Ohio, for turbine wheels. The Water Power Electric Co.'s president is M. E. Thornton of Hickory; engineer in charge, C. S. Wenger of Brownstown, Pa. Company's plan was recently referred to in detail when proposals for construction, etc., were being invited.

Hinton, W. Va.—J. Turner Moorehead of New York city is reported as planning the development of the New River falls water-power property which he purchased previously; the power to be transmitted by electricity.

Lancaster, S. C.—City is considering construction of electric-light system. (See item under "Water-works.") Address The Mayor.

Lawrenceburg, Tenn.—City will award contract September 13 for materials and labor for constructing lighting plant; Walter G. Kirkpatrick, engineer, Jackson, Miss. (See item under "Water-works.")*

Little Rock, Ark.—Little Rock & Pine Bluff Traction Co. is preparing to build electric-power plant for its 50-mile railway, and is now considering proposals from construction contractors and machinery manufacturers; J. J. Flske, president; offices at 501 Main street.*

Texhoma, O. T.—Texhoma Electric Light, Water & Ice Co. incorporated with \$15,000 capital stock by W. A. Turner, Wallace G. Hughes, I. J. Osborne, W. A. Mason and others.

Tryon, N. C.—Tryon Electric Light & Power Co. contemplates changing original plans and erecting larger plant on Pacolet river for furnishing electricity for manufacturing and lighting; proposed to expend \$110,000; Todd Russell, general manager; G. Hamilton Holmes, C.E., engineer in charge. (Referred to in May.)

Whitney, N. C.—The Whitney Company has completed water-power dam, 960 feet long and 46 feet high. Construction is progressing on accompanying canal to the Narrows of Yadkin river, four and one-half miles distant, minimum depth to be 13 feet and maximum depth 82 feet. Construction of power-house at the Narrows and of pole line for transmission wires will begin soon. Company is surveying 600 acres of land to be cleared and platted for industrial city, and will plat 500 acres on the river as sites for manufacturing plants. John S. Henderson of Salisbury, N. C., is manager; Geo. I. Whitney of Pittsburgh, Pa., is president. (This water-power-electrical development, previously referred to in detail, involves developing and transmitting 76,000 horse-power; dam completed is for 40,000 horse-power; second dam and plant will be 36,000 horse-power.)

FOUNDRY AND MACHINE PLANTS

Birmingham, Ala.—Besco Supply Co., reported incorporated last week with \$5000 capital stock, will deal in and act as agent for electrical machinery and supplies; will begin manufacturing in 1909. H. K. Bernard is president and general manager, E. F. McCrossin vice-president and W. P. McCrossin secretary-treasurer.

Dallas, Texas.—Hardwick-Webb Machine Co. has changed name to Hardwick Foundry & Machine Co. and increased capital stock from \$20,000 to \$40,000; is now building foundry 80x140 feet, with 60-inch cupola, 10-ton electric crane and pattern shop 30x50 feet. Will manufacture structural iron work, railroad frogs and switches, general foundry and machine products. (Referred to last week.)

Dallas, Texas.—J. S. Baker, 639 Washington avenue, is reported to establish plant for manufacturing a machine for hanging wallpaper.

Ensley, Ala.—Reported that the Atlanta, Birmingham & Atlantic Railroad will erect proposed roundhouse, yards and shops in Ensley instead of Bessemer, Ala., as previously stated; Alex. Bonnyman, chief engineer, Atlanta, Ga.

Gonzales, Texas.—Blacksmith Shop.—A. Farmers will erect one-story brick blacksmith shop.

Greensboro, N. C.—Greensboro Air Brake Co. incorporated with \$25,000 capital stock by Samuel L. Trogden, Nell Ellington and W. Z. Brown to acquire rights of the Wright Automatic Safety Air Brake Attachment Co. and to manufacture air brakes.

Guthrie, O. T.—Southwestern Iron Co. will install additional equipment.

Kansas City, Mo.—Star Brass Works Co. incorporated with \$10,000 capital stock by A. A. Wixon, E. E. Norquist, W. D. Sheddon and others.

Lexington, Tenn.—Lexington Machine Works incorporated with capital stock of \$15,000 to operate general repair shop and build steam

engines; will buy and install gasoline or oil engine, stamping press, foundry equipment, machine tools, etc.; incorporators, H. E. Graper, W. T. Watson, E. Jones, J. S. Fleider and John W. Stewart. Address H. E. Graper.*

Louisville, Ky.—William F. Schaber Company incorporated to operate sheet-metal and tin works by William F. Schaber, M. A. Schaber and D. E. Schaber.

Newbern, N. C.—Oaks Manufacturing Co., manufacturer of agricultural machinery, will erect new brick building, to be equipped with modern machinery electrically operated. Side track will be laid from the Norfolk & Southern Railroad. It is understood that machinery has not been purchased.

Savannah, Ga.—Savannah Electric Co. is reported contemplating the establishment of a plant for building and repairing electric railway cars. M. L. Sperry is manager.

St. Louis, Mo.—Modern Machine Co. is erecting plant 50x150 feet to be equipped for manufacturing embossing presses, gasoline engines, hacksaws and portable cylinder boring bars. Company will also do all kinds of repair work and furnish special machinery. Samuel L. Curtis is president, George Remsnider vice-president and general manager and F. C. Hippler secretary-treasurer.

St. Louis, Mo.—A. Gilbert & Sons Brass Foundry Co., 204 Eugenia street, will erect factory buildings; steel construction; 75x180 feet; cost of buildings and machinery, \$25,000; manufacture brass, bronze and white metal; daily capacity, 18 tons; manager, Charles F. Gilbert.

Sumter, S. C.—Sumter Machinery Co. has increased capital stock from \$12,000 to \$20,000; will erect another workshop and install new machinery.

ICE AND COLD-STORAGE PLANTS

Argenta, Ark.—Argenta Ice & Cold Storage Co., recently reported organized, will establish ice and cold-storage plant; capacity, 50 to 75 tons ice daily; building 300x200 feet will be erected, of frame and sheet-iron construction; cost of buildings \$10,000; cost of machinery \$40,000; president, Dr. H. L. White; manager, U. S. Goodwin.*

Baton Rouge, La.—Baton Rouge Ice Co. will build the ice plant lately mentioned; building to be of frame and iron, 50x100 feet; cost, with equipment of machinery, about \$10,000; capacity daily to be 10 tons; W. P. Kidd and Charles F. Sarver, managing officers.

Fort Morgan, Ala.—United States Government will award contract for construction of 150,000-gallon tank and trestle and for pumping, ice machinery and cold-storage plant. Proposals are invited. Address Capt. Louis F. Garrard, Jr., Box 605, Mobile, Ala.

Fort Worth, Texas.—Shaw Bros. will establish ice plant with capacity of 100 tons daily.

Gadsden, Ala.—Alabama City, Gadsden & Attalla Railway will build addition to ice factory. Preliminary surveys are now being made and it is understood that construction work will soon begin. It is planned to install an equipment of 600 vats of 400 pounds capacity each, which, with output of present factory, will produce about 100 tons daily.

Gadsden, Ala.—Ledbetter Produce Co. has awarded contract to H. M. Johnson & Sons at \$5800 for erection of cold-storage warehouse; 50x110 feet; ordinary brick construction; cost of building and equipment about \$10,000; A. D. Simpson, architect.

Ozark, Ark.—W. H. Filker is interested in the contemplated establishment of an ice plant.

Shawnee, O. T.—Polar Wave Ice Co. incorporated with \$50,000 capital stock by A. M. Baldwin and Clyde E. Scott, Tecumseh, O. T., and E. Hoernig, Fond du Lac, Wis.

Texhoma, O. T.—Texhoma Electric-Light, Water & Ice Co. incorporated by W. A. Turner and others. (See item under "Electric-light & Power Plants.")

LUMBER-MANUFACTURING PLANTS

Abbeville, La.—Cypress Point Lumber Co. incorporated with \$12,000 capital stock; J. N. Greene, president and treasurer, and J. H. Lutgring, vice-president and treasurer.

Alken County, S. C.—R. L. Montague, Charleston, S. C., has purchased timber rights on about 4000 acres of timber land in Alken county; property will probably soon be developed.

Asheville, N. C.—Philip B. Heints, 142 P street, Boston, Mass., recently reported to have purchased timber lands, has bought for himself and others a tract of about 20,000 acres of hardwood timber land near

Asheville; purchase was made for investment; plans for operation not yet settled.

Bartlett, Texas.—Bartlett Lumber Co. incorporated with \$30,000 capital stock by A. A. Gunn, J. W. and C. W. Webb.

Belzoni, Miss.—Interstate Cooperation Co., Memphis, Tenn., is installing heading mill at Belzoni, where it has purchased large tract of timber land at a price said to have been \$150,000.

Benson, N. C.—Benson Lumber Co. incorporated with \$30,000 capital stock by W. J. Jacobs of Benson; E. W. Harris, Dunn, N. C., and George W. Beall, Durham, N. C.; will establish lumber plant with daily capacity of 10,000 feet dressed lumber.

Calico Rock, Ark.—H. Ehlers & Son of Iowa, owning tract of pine timber land in Izard county, Arkansas, are reported to establish saw and planing mill at Calico Rock.

Campbell, Ark.—Thomas Morrison will rebuild sawmill recently burned at a loss of \$2000.

Campton, Ky.—Broadhead & Garrett, Winchester, Ky., are reported as having purchased about 300 acres of timber land near Campton for development. Branch railroad will be constructed.

Corinth, Miss.—North Mississippi Lumber Co. (offices in Tennessee Trust Building, Memphis, Tenn.) is installing proposed mill at Corinth, to have daily capacity of 100,000 feet of lumber. Plant will be equipped with resaw and will include saw, planing and finishing mill and drykilns. About \$50,000 will be expended. Company controls about 200,000,000 feet of timber located 30 miles from Corinth, and has options on about 400,000,000 feet; E. B. Causey, president. (Referred to in May.)

Curtison, Ala.—Erie Lumber Co., reported last week as incorporating with a capital stock of \$100,000, will contract cutting and manufacturing yellow-pine lumber for outside parties; 50,000 feet daily; principal office of company, Erie, Pa.; D. C. Curtis, president; A. E. Swanson, secretary, Columbus, Miss.

Dardanelle, Ark.—Dardanelle Hardwood Manufacturing Co. will establish plant for the manufacture of hardwood lumber; capacity 30,000 feet; 80x100-foot building will be erected; cost of building \$5000; cost of machinery to be installed \$30,000; architect, W. R. Perkins; officers are D. Crownover, C. B. Cotton and F. H. Phillips.

East Carroll Parish, La.—Tennessee Lumber Co., organized at Lebanon, Tenn., will develop 200 acres of timber land in East Carroll Parish, estimated to cut about 8,000,000 feet.

Eufaula, Ala.—L. E. Irby is installing sawmill. John Poston is in charge.

Frenchton, W. Va.—Buchanan Lumber Co., lately reported incorporated (under Buchanan by error) with capital stock of \$30,000, will operate plant having daily output of 25,000 feet of lumber—hardwoods, poplar and hemlock. E. R. Buchanan of Loraine, Ohio, is president. Principal address of company is Frenchton.

Houston, Texas.—Schlattman & Lincoln, Humble, Texas, will erect planing mill.

Jamesville, N. C.—Boyle Manufacturing Co., lately reported incorporated with capital stock of \$30,000, will build mill 30x100 feet, expending \$8000 for structure and equipment of machinery; daily output to be 20,000 to 25,000 feet of lumber and 15,000 shingles; J. P. Doyle, president; W. H. Stallings, secretary-treasurer, and J. F. Hardison, manager.*

Lyons, Ga.—Garbutt & Donovan Manufacturing Co. will be incorporated with \$20,000 capital stock by W. O. Donovan, R. M. Garbutt, F. M. Smith and F. F. Goddard to take over and continue enterprises conducted by Garbutt & Donovan, F. M. Smith & Co. and Smith, Garbutt & Co. New company will begin at once the rebuilding of Smith, Garbutt & Co.'s sawmill reported burned in June. New sawmill will be 50x200 feet; buildings and machinery to cost about \$50,000; daily capacity to be 50,000 feet yellow pine lumber.*

Memphis, Tenn.—Ford Hardwood Lumber Co. organized with \$30,000 capital stock by E. M. Ford, E. M. Ford, Jr., and L. W. Ford.

Morehead, Ky.—Clearfield Lumber Co., Clearfield, Pa., is building concrete dryhouse and planing mill at Morehead, in addition to band mill now in operation. (Company was recently mentioned as building mill, etc., at Mt. Sterling, Ky.)

Oberlin, La.—Louis C. Black, Hamilton, Ohio, has purchased 976 acres of pine timber land near Oberlin at \$13,191.50. Transfer also includes rights of way over the property and adjoining lands for tramways, skidders, etc.

Ola, Ark.—Ola Lumber Co. will operate sawmill in connection with planing mill. It

is also contemplated to install electric-lighting plant for town.

Pike County, Ky.—Dr. Vickers and W. B. Taylor, Pikeville, Ky., have purchased 6000 acres of timber land in Pike county.

Pondsville (P. O. Cavetown), Md.—A. M. Kalbach will rebuild sawmill recently burned. Material and machinery has been ordered.

Porto Rico (not a postoffice), Ark.—Porto Rico Planting Co. organized with \$50,000 capital stock by Sigmund Sachs, Althelmer, Ark.; Lewis Sachs, Jonesboro, Ark., and R. M. Foster, St. Louis, Mo., to conduct plantation and operate hardwood mill at Porto Rico.

Rockwood, Tenn.—Lone Mountain Coal & Lumber Co. will lease to others its timber lands for development. (See item under "Coal Mines and Coke Ovens.")

Rosslyn, Va.—Arlington Lumber Co. incorporated with \$15,000 capital stock; Henry C. Corbett, president and treasurer; Stuart T. Ashton, vice-president and secretary, both of Arlington, Va.; Charles Kronk, manager, of Rosslyn. Company has leased building. Machinery will be installed for daily capacity of 6000 to 8000 feet of lumber.

Rusk, Texas.—Penitentiary Board will build sawmill with daily capacity of 50,000 feet to cut ties and bridge timber for new State railroad being constructed from Rusk to Palestine, Texas.

Sulligent, Ala.—Harris & Cole Bros., Cedar Rapids, Iowa, will establish band mill at Sulligent with daily capacity of 35,000 feet for development of 30,000,000 feet of hardwood and 12,000,000 feet of short-leaf pine timber. Company will also build 10 miles of logging railroad; J. W. Bishop, manager of Columbia (Tenn.) yard and mill.

Vacherie, La.—Vacherie Cypress Co., organized with \$600,000 capital stock by John Sherman Hoyt, No. 1 Broadway; W. H. Woodin and F. L. Slade, all of New York, N. Y., has purchased 200,000,000 feet of cypress timber in Ascension, St. James and Lafourche parishes, Louisiana, for development, and will practically build a new town at Vacherie; purchase price, between \$1,000,000 and \$1,500,000. Transfer was made by Miles Timber Co., subsidiary to Miles Planting & Manufacturing Co., and includes only timber rights. Vacherie Cypress Co. will build nine-foot band mill, equipped with six-foot pony band, daily capacity to be between 65,000 and 70,000 feet; planing mill equipped with modern machinery capable of handling any increased output of sawmill; standard-gauge tramroad, requiring in construction 40 logging cars, two skidders and two locomotives, and to be used for transporting all logs consumed by sawmill; feed-pipe line from Mississippi river to log pond of sawmill, requiring one mile of cast-iron piping; commissary, residences and other adjuncts. W. H. Martz, Hibernia Bank Building, New Orleans, La., is manager of the John Sherman Hoyt interests in the South. Mill machinery order has been placed with Allis-Chalmers Company, Milwaukee, Wis.; boilers with Erie City Iron Works, Erie, Pa.; skidders with Lidgewood Manufacturing Co., New York, N. Y.; orders for other material not yet placed.

Wolfe County, Ky.—E. B. Camp, Morehead, Ky., is reported as having purchased timber land in Wolfe county for development.

MINING

Aurora, Mo.—Golden Jack Mining Co. incorporated with \$100,000 capital stock by D. P. Loy, L. A. Tooker and E. J. Loy.

Carthage, Mo.—Cambria Mining Co. incorporated with \$100,000 capital stock by J. H. Page, William Fox, E. E. Paul and others.

Clarksburg, W. Va.—Clarksburg Zinc Co. incorporated with \$50,000 capital stock by James N. Hess, W. Lee Williams, Thomas W. Ward and others.

Crudup, Ala.—Crudup Iron Ore Co., recently reported incorporated with \$50,000 capital stock by J. P. Kendrick and others, all of Chattanooga, Tenn., is preparing to develop its mines at Crudup. Company has taken over plant and equipment of Etowah Mining Co. and purchased seven acres of land.

Danville, Ky.—Burton H. Vance, Louisville, Ky., and associates, will establish barytes mill, investing about \$100,000. Company has leased and is now developing about 50,000 acres of barytes lands east of Danville. The barytes will be shipped to mills in New York until the mill at Danville is completed.

McAlester, I. T.—John and Wm. Schenck are reported as to develop lead-ore deposits.

Mt. Washington, Md.—F. R. Van Antwerp of Hornell, N. Y., has purchased and will develop the Bare Hills copper property near Mt. Washington. He is now arranging to install pumping plant to unwater the mine and for compressors, hoists, electric pumps, elec-

tric generator, etc., for mining. Address at Mt. Washington. (Recently incorrectly reported.)*

New Canton, Va.—James River Slate Co. incorporated with \$50,000 capital stock to operate slate quarries by John T. McKeena of New Canton; C. C. Farinholt, Richmond, Va.; Charles J. Anderson, New Haven, Conn., and others. Company has purchased 200 acres of land near New Canton.

Slate Ridge (not a postoffice), Md.—South Delta Peach Bottom Slate Co. incorporated with \$30,000 capital stock to operate slate quarries at Slate Ridge by John G. Lindsay, Washington, D. C.; John W. Jones, Delta, Pa., and others.

Towson, Md.—The Frank H. Zouck Company incorporated by Frank H. Zouck, H. Howard Russell, Charles C. Allnutt and others to quarry stone.

MISCELLANEOUS ENTERPRISES

Alexandria, Va.—Inventions.—Milton Industrial Co. incorporated with \$50,000 capital stock to own inventions of John Milton; John Milton, president; Nelson Wilson, secretary, both of Washington, D. C., and Geo. F. Eamlich, treasurer, Lovettsville, Va.

Atlanta, Ga.—The Picard Law Co. reported incorporated last week with \$50,000 capital stock, has organized with D. C. Picard, president; Thos. C. Law, secretary-treasurer, and F. H. Sawyer, engineer in charge. Will act as consulting and analytical chemists, designers and builders of chemical-engineering plants. Offices at 231½ Marietta street.

Baltimore, Md.—Vehicles.—Neumann Bros., Inc., incorporated with a capital stock of \$3000 to deal in vehicles by John Neumann, 1400 Harford avenue; Frank C. Neumann, Ernest Neumann and others.

Baltimore, Md.—Steamboat Line.—Agriculturist Commercial Storage Co., recently incorporated with a capital stock of \$150,000 to operate a line of steamboats between Baltimore and points on the Eastern Shore of Maryland, is making arrangements to increase its capital stock to \$500,000; wharf sites have been secured on Miles river, and one or more steamboats will be purchased; several new wharves to be built and old ones repaired; officers are Philip Uhler Harvey, president, 814 American Building; J. G. Harvey, Jr., secretary-treasurer; Howard Telbis, general counsel.

Baltimore, Md.—Glass Works.—Charles F. Scofield, secretary the Huntsville Trust & Realty Co., Huntsville, Ala., is investigating with a view of establishing glass works at Baltimore to manufacture, by Venetian process, glass for decorative purposes—tiling, vases, etc., table tops, etc.

Baltimore, Md.—Straus Chemical Co. has been incorporated with capital stock of \$10,000 to manufacture chemical appliances and products by Joseph H. Straus, 2350 Eutaw Place; Henry P. Straus, Charlotte R. Straus, Albert E. Donaldson, Calvert Building, and Henry Gilligan.

Barstow, Texas—Irrigation.—Hillside Land & Irrigation Co. incorporated with \$50,000 capital stock by T. W. Crouch, J. M. Woods and W. V. Delahunt, all of St. Louis, Mo., and others.

Bay Minette, Ala.—Land Improvement.—Bay Minette Land Co. incorporated with \$300,000 capital stock to take over and develop property purchased last year by Hampton D. Ewing, Charles C. Hand and Jay P. Mix of Bay Minette and Hampton D. Ewing, New York city, are incorporators.

Beaumont, Texas—Oil Wells.—Lillian Oil Co. incorporated by Harry Heilbron, Andrew Williams and Joe Kelley.

Beaumont, Texas—Oil Wells.—Diamond Platt Oil Co. incorporated with \$4000 capital stock by William Neagher, Frank Neagher, Andrew Neagher and J. E. Todd.

Birmingham, Ala.—Birmingham Junk Co. incorporated with \$10,000 capital stock to deal in scrap iron and second-hand machinery by M. B. Hermon, W. A. Roseman, H. I. Goldstein and David Goldstein.

Blackstone, Va.—Drugs.—L. B. Spencer Drug Co., incorporated with \$15,000 capital stock; Robert B. Spencer, president, and Janet Spencer, secretary-treasurer.

Blanton, Miss.—Tramway.—Steeles Bayou Tramway & Manufacturing Co. incorporated with \$30,000 capital stock to construct and operate a private standard-gauge steel railway or tramway by G. W. Sims and J. E. Meadows, both of Memphis, Tenn.; Geo. J. Nattkemper and J. R. Connelly, both of Terra Haute, Ind. (Company was recently reported incorporated without proper addresses of incorporators.)

Canyon, Texas—Hardware.—Thompson Hardware Co. incorporated with \$25,000 capital stock by W. A. Johnson, H. L. Gill and T. C. Thompson.

Canyon, Texas.—Hardware.—Thompson Hardware Co. incorporated with \$25,000 capital stock by W. A. Johnson, H. L. Gill and T. C. Thompson.

Center Point, W. Va.—Oil and Gas Wells.—Elk Horn Oil & Gas Co., recently reported incorporated with \$15,000 to drill for oil and gas, will erect buildings and install machinery at cost of \$5000; daily capacity, 50 barrels oil; engineer and manager, Virgil I. Allen.

Centertown, Mo.—Cannery.—Centertown Canning Co. incorporated by John W. Horak, Henry Huckmann, Chris Huttenmeyer and others.

Cleveland, O. T.—Oil and Gas Wells, etc.—Progress Oil, Gas & Mining Co. incorporated with \$100,000 capital stock by Thomas F. Galley, O. C. Wing, J. F. Height and others.

Covington, Va.—Coal and Timber Land.—Webster Coal & Land Co. incorporated with \$25,000 capital stock to deal in coal and timber lands; C. P. Dorr, president, and J. S. Cogar, secretary, both of Webster Springs, W. Va.

Crossville, Tenn.—Construction.—Southern Fireproof Construction Co. has been organized with Wm. Jarrett, architect and manager, and J. S. Reed, secretary and treasurer. This company succeeds Jarrett & Alised, and will engage in contracting and building, making a specialty of brick, stone, concrete and iron and steel jail work.

Fernandina, Fla.—Phosphate Elevator.—Reported that Seaboard Air Line Railway, W. L. Seddon, chief engineer, Portsmouth, Va., contemplates rebuilding phosphate elevator recently reported burned at a loss of \$150,000.

Flatonia, Texas.—Creamery.—Lacy & Rhodes, Rock Island, Texas, are promoting organization of stock company to build creamery at Flatonia.

Forrest City, Ark.—Cotton Compress.—Gulf Compress Co. will increase facilities by adding about 46,000 square feet to shed, 70,000 square feet of open platform space, erection of office building and other improvements to plant.

Fort St. Philip, La.—Sea Wall.—Weinlingen Steel Piling Co., New York, N. Y., is lowest bidder, at \$94,010, for enlargement of portion of back or gulf levee at Fort St. Philip; construction of new levee and reinforcement of levee with row of interlocking sheet piles, with a reinforced concrete capping. All levees to be constructed or enlarged to have a net grade of eight feet above gulf level, slopes three horizontal to one vertical; eight-foot crown; approximate length of levee to be enlarged, 3670 feet; approximate volume of earth to be placed in levee enlargement, 7000 cubic yards; approximate length of new levee to be constructed, 630 feet; approximate volume of earth to be placed in new levee, 3600 cubic yards; approximate horizontal length of steel piling, 4300 feet; approximate area of steel piling, 91,700 square feet; approximate weight of steel piling, 1430 tons; approximate length of concrete capping, 4300 feet; approximate volume of concrete capping, 1300 cubic yards; approximate weight of reinforcing plain round rods, 55 tons; Colonel Ruffner, United States Engineer, in charge.

Houston, Va.—Tobacco Company.—Halifax Co-operative Tobacco Co. incorporated with \$50,000 capital stock to deal in leaf tobacco; T. E. Dickenson, president; A. G. Pool, vice-president, both of Meadville, Va., and W. I. Johnson of Houston, secretary-treasurer.

Houston, Texas.—Hardware.—Adoue-Blaine Hardware Co. incorporated with \$100,000 capital stock by J. B. Adoue, James G. Blaine, Henry Cook and others.

Hugo, I. T.—Creosoting Plant.—American Creosoting Plant has let contracts for grading, concrete work and tracking in connection with proposed creosoting plant.

Joplin, Mo.—Publishing.—Joplin Printing Co. incorporated with \$5000 capital stock by O. P. Meloy, Tom P. Fry and Fred W. Kelsey.

Lexington, Tenn.—Telephone System.—Broadway Home Telephone Co. has been organized with \$5000 capital stock to construct telephone system from Lexington to Juno, Tenn.; Jere Hawthorne, president; F. M. Evans, secretary; Rev. A. H. Inaco, treasurer.

Lexington, Va.—Hardware.—Myers Hardware Co. incorporated with \$25,000 capital stock; S. M. Dunlap, president; Sydney W. Wilson, vice-president, and W. Horace Lackey, secretary-treasurer.

Madison, Fla.—Tobacco Cultivation.—Company has been organized with \$25,000 capital stock by the Freiligh-Smith Company and H. M. Taylor to grow tobacco and build packing-house.

Miami, Fla.—Jetty Construction.—Roderick G. Ross, Jacksonville, Fla., submitted low-

est bid and will probably receive contract for improvements to jetties in Bay Biscayne, near Miami. Major Beach, United States engineering officer, Florida division, will tabulate bids and forward to Washington. According to specifications, work consists of extension of present jetty seaward a distance of 250 feet and building jetty about 1700 feet long on south side of entrance parallel to north jetty and distant from it about 1000 feet; hearting of jetties to be of coral rock, pieces used to weigh from 10 to 300 pounds; capping of granite, each piece to weigh not less than 1000 pounds, or if granite is not used, stone of equal hardness and durability must be used. It is estimated that amount of material to be used in north jetty will be 8900 cubic yards for hearting and 1600 tons for capping; for south jetty, 27,000 cubic yards for hearting and 7700 tons for capping.

Mobile, Ala.—Abattoir.—Henry T. Hartwell is promoting organization of company to build abattoir.

Munday, Texas.—Hardware, etc.—Castles-Penick Company incorporated with \$20,000 to conduct a hardware, implement and furniture enterprise by Mac Castles of Munday, R. L. Haynie and R. L. Penick, Stamford, Texas.

Nestorville, W. Va.—Oil Wells.—George and Andrew Hardin are reported to drill for oil.

New Orleans, La.—Levee Construction.—Contract will be awarded September 20 for construction of Burton to Londerbough levee, about 25,000 cubic yards, in the Lake Borgne Levee District; J. F. McIndoe, Captain Engineers.

New Orleans, La.—Oyster Cannery.—G. W. Dunbar & Sons will erect oyster and shrimp cannery at Doullut's Canal, investing about \$25,000.

New Orleans, La.—Levee Construction.—State Board of Engineers has awarded the following contracts for levee construction: R. F. Clark, enlargement of Racconcel, in Pointe Coupee parish, at 23½ cents per cubic yard; M. Hunt, Rattling Slough levee, in Caddo parish on Red river, containing 100,000 cubic yards, at 22½ cents per cubic yard, and to W. G. Burt, Dortch Bend levee, on Red river in Bossier parish, containing 250,000 cubic yards, at 24½ cents per cubic yard.

New Orleans, La.—Levee Construction.—Board of Commissioners Orleans Levee District, Charles T. Yenn, president, has awarded contract for levee construction in Third and Fourth districts to Adam Ruppel at an estimated total cost of \$89,000 in Third district and \$91,000 in Fourth district. Work in Third district consists of construction of portion of new levee, with retaining walls; length, 1700 feet; contents, about 50,000 cubic yards of earthwork; 2700 linear feet of retaining wall, with 100,000 feet of lumber in revetment. In Fourth district work includes construction of portion of new levee, with retaining walls; length, 1500 feet; contents, 30,000 yards of earthwork and about 2500 linear feet of retaining wall. Contract for work in Sixth and Seventh districts was awarded to the General Contracting Co. at an estimated total cost of \$11,000, and calls for construction of banquettes on land side of levee; length, 8500 feet; contents, 40,000 cubic yards of earthwork.

Norfolk, Va.—Hide and Fur.—Virginia Hide & Fur Co. incorporated with \$25,000 capital stock; W. Y. Costen, president, and J. O. Thurman, vice-president.

Norfolk, Va.—Land Improvement.—Long Point Land Co. incorporated with \$10,000 capital stock; L. M. Silvester, president; J. L. Heard, vice-president, and W. W. Silvester, secretary-treasurer.

Pensacola, Fla.—Land Improvement.—Pensacola City Land Co. incorporated with \$50,000 capital stock by Leslie E. Brooks, Scott M. Loftin and Harry L. Brooks.

Pine Bluff, Ark.—Limekilns.—Pine Bluff Brick Co. has about completed repairs rehabilitating its limekilns, referred to last week as damaged by fire.

Port Arthur, Texas.—Cotton Compress.—Kansas City Southern Railway, A. F. Rust, engineer, Kansas City, Mo., will build cotton compress at Port Arthur, as reported lately. Plant to be a small farmers' compress for replacing broken bands and will cost about \$3500.

Portsmouth, Va.—Land Improvement.—Guthrie Land Co. incorporated with \$25,000 capital stock, Joseph A. Guthrie is president and R. S. Brooks secretary-treasurer.

Russellville, Mo.—Cannery.—Russellville Canning Co. incorporated with \$3000 capital stock by Adam Ott, Louis Schneider, John C. Gemelhardt and others.

Rockingham, N. C.—Land Improvement.—Rockingham Development Co. incorporated with \$50,000 capital stock by W. C. Leak, J.

P. Leak, R. L. Steele, M. L. Hinson and others.

Shreveport, La.—Land Improvement.—Investment Realty Co. is being organized to erect residences and improve real estate.

Tampa, Fla.—Channel.—Bowers Southern Dredging Co., Galveston, Texas, submitted lowest bid at \$155,000 for 25-foot channel from the Gulf to Port Tampa, connecting portions already dredged. Work will be done with dump scows. Bid has been forwarded to Washington with recommendations.

St. Louis, Mo.—Construction.—Syndicate Construction Co. incorporated with \$10,000 capital stock by George C. Bogue, Frank W. Feuerbacher and George Beck.

St. Louis, Mo.—Construction.—Crawford Construction Co. incorporated with \$25,000 capital stock by Frank W. Jackson, Fred L. Bunton, Lyle B. Ritchie and others.

St. Louis, Mo.—Publishing.—La Era Electric Publishing Co. incorporated by J. P. Casey, Benito Abalades and W. H. Nolker.

St. Louis, Mo.—Land Improvement.—White River Land Co. incorporated with \$20,000 capital stock by H. A. Kramer, Benjamin Gratz, C. F. Brown and others.

Vinton, Texas.—Canal.—L. F. Daniels, Civil Engineer, Beaumont, Texas, will make preliminary surveys for rice canal, which Orange (Texas) capitalists contemplate constructing to irrigate 7000 acres of land near Vinton.

Ward County, Texas.—Irrigation.—Loop Land Irrigation Co. incorporated with \$50,000 capital stock by T. W. Crouch, J. M. Woods and W. V. Delahunt, all of St. Louis, Mo., and others.

Weatherford, Texas.—Grain Mill and Elevator.—Hartnett & Bradfish will build grain mill and elevator, investing about \$10,000. Plant will be equipped with grain mill (having a daily capacity of 2000 sacks of corn chops) grain cleaning and unloading machinery.

Wellsburg, W. Va.—Gas and Oil Wells.—Smith-Hunter Oil & Gas Co. incorporated with \$100,000 capital stock by Fred E. Smith, Ed. M. Smith, John E. Smith, Jr., and others.

Westminster, Md.—Publishing.—American Sentinel Co. incorporated to take over and continue the publication of the American Sentinel. Nathan H. Balie, New Windsor, Md., president; Simon P. Weaver, vice-president, and Jacob H. Handley, secretary-treasurer.

Wheeling, W. Va.—Oil Wells.—Perceenweyn Oil Co. incorporated with \$50,000 capital stock by W. H. Sweeney, W. H. Halliday, G. L. Ormiston of Wheeling and J. O. Howells, Bridgeport, W. Va.

MISCELLANEOUS MANUFACTURING PLANTS

Anderson, S. C.—Pipe-organ Factory.—American Pipe Organ Co., August Bauer, president, Pomeroy, Ohio, is considering establishment of organ factory in Anderson.

Atlanta, Ga.—Automobile Works.—H. A. Williams, Akron, Ohio, proposes to establish in the South the Herculean Motor Car Co. and plant for manufacturing automobiles. Location has not been chosen and suggestions are acceptable to Mr. Williams. Address at Akron.

Augusta, Ga.—Pottery.—Augusta China-ware Co., recently reported incorporated with \$25,000 capital stock, will soon begin construction of two-kiln plant to be equipped for manufacturing various kinds of ironstone china and semi-porcelain ware; Abe Levy, president, and James S. Hunter, secretary-treasurer.

Baltimore, Md.—Glass Works.—Charles F. Scofield, care of Bridgeport Realty & Trust Co., Bridgeport, Ala., is investigating with a view of establishing glass works at Baltimore to manufacture, by Venetian process, glass for decorative purposes—tiling, wainscoting, table tops, etc.

Baltimore, Md.—Novelties, etc.—Baltimore Enamel & Novelty Co., foot of Allen street, is securing revised estimates on proposed addition to its plant; structure will be one-story, 64x122 feet; B. C. Sandlass, engineer.

Beaumont, Texas.—Manufacturing.—J. Dalton Ward has purchased block of property at \$20,000 to be used as site for a manufacturing enterprise.

Bessemer, Ala.—Fertilizer Factory.—Mr. Lowndes, recently of the Jefferson Fertilizer Co., and associates are organizing company with \$50,000 capital stock to establish fertilizer factory with capacity of 10,000 tons.

Bluefield, W. Va.—Gas Works.—Bluefield Gas Co. incorporated with \$50,000 capital by A. H. Land and J. F. Land of Bluefield, Raymond M. Hudson, Norfolk, Va., and others.

Blue Ridge, Va.—Distillery.—Blue Ridge Distilling Co., lately reported incorporated, will operate plant with daily output of 80 gallons of corn and rye whisky; buildings already erected. D. I. Boyd, manager; J. T. Cruise, secretary-treasurer.

Bryan, Texas.—Snuff Factory.—C. P. Girardino will establish snuff factory, to consist of brick and cement furnace for drying tobacco, two snuff mills and other smaller machinery, whole to be operated by 12-horse-power gasoline engine.

Cape Girardeau, Mo.—Brewery.—Max Koeck, manager, will erect addition to brewery; four stories; brick, stone and reinforced concrete; cost \$150,000. Plans are being prepared by Widmann & Walsh, Wainwright Building, St. Louis, Mo.

Charleston, S. C.—Paint and Roofing Manufacturing.—Southern Gibraltar Paint & Roofing Co., recently reported incorporated with \$25,000 capital stock, will at first sell paints, oils, roofing, etc., and later manufacture, producing among its products a special kind of non-combustible paint. Following officers have been elected: L. C. A. Roessler, president; H. O. Hasselmeyer, secretary-treasurer, and W. St. Julien Jervey, solicitor.

Chattanooga, Tenn.—Suspender Factory.—Chattanooga Suspender Co. has increased capital stock from \$5000 to \$15,000.

Columbia, Tenn.—Fertilizer Factory.—Sterling Phosphate Co. incorporated with \$30,000 capital stock by H. F. Alexander, J. A. Skelley, Eugene Anderson and others.

Dallas, Texas.—Syrup Factory.—Dallas Syrup Co. incorporated by W. S. Kirby, J. M. Phillips and C. S. Mitchell, Jr.

Granger, Texas.—Cottonseed-oil Mill.—Granger Oil Mill incorporated with \$50,000 capital stock by J. D. Sugg, N. K. Smith and A. W. Storrs; plant under construction; includes seed and hull houses of corrugated iron and main building with concrete foundation and brick superstructure; machinery purchased; capacity, 60 tons; electric-light plant, in connection, furnishes light to city and public. (Recently incorrectly mentioned.)

Guthrie, O. T.—Cotton-oil Mill.—Houghton-Douglass Cotton Co. will install additional equipment in cottonseed-oil mill.

Huntingdon, Tenn.—Concrete-block Factory.—F. H. Watson, recently reported to establish concrete plant, will not organize company; is manufacturing blocks only for personal use.

Huntsville, Ala.—Paper Mill.—Southern Paper Co. of Atlanta, Ga., through its representative, W. O. Bellaire, is interested in contemplated mill for manufacturing paper from cotton-mill waste. (Mentioned last week.)

Johnson City, Tenn.—Bakery.—H. W. Par-due will erect bakery and store building.

Laurel, Miss.—Pulp and Paper Mill.—M. Muhle and associates are planning the organization of a company with capital stock of \$800,000 to establish a plant for manufacturing pulp and paper. They propose to interest Northern capitalists in the enterprise.

Lynchburg, Va.—Furniture Factory.—Blankinship Furniture Co. incorporated with \$15,000 capital stock; John S. Blankinship, president; Richard Blankinship, vice-president; Olin Blankinship, secretary, and R. I. Blankinship, treasurer.

Lynchburg, Va.—Tobacco Factory.—Booker Tobacco Co. incorporated with \$50,000 capital stock; George M. Booker, president; William J. Morrisett, vice-president, and J. B. Strachan, Jr., secretary-treasurer.

Madison, N. C.—Overall Factory.—Madison Overall Manufacturing Co. has been organized to establish overall factory.

Martinsburg, W. Va.—Gas Company.—Martinsburg Gas Co. will change from coal gas to water gas system and make other improvements to plant, increasing capacity from 30,000 cubic feet to 150,000 cubic feet of gas per day. Water gas system will require five "shells," consisting of generator, carburetor, superheater, condenser and scrubber. Company will also increase motive power by installation of 40-horse-power boiler and 10-horse-power engine. An addition has been built to plant. Reported that some machinery contracts have been awarded.

Milledgeville, Ga.—Brick Plant and Pottery.—Baldwin County Brick & Pottery Co. incorporated to manufacture common, pressed and ornamental brick and sewer pipe, by A. A. Vaughn, E. L. Barnes, T. M. Hall and others.

New Orleans, La.—Sugar and Rice.—Louisiana Sugar & Rice Co., 413-415 South Peters street, recently reported incorporated with \$100,000 capital stock, will deal in sugar, molasses and rice, to be handled in carload lots especially for use of company. T. M.

Madden, owner, will erect four-story brick building, 27x30 feet, at cost of about \$15,000; Jas. C. Drew, president and general manager.

New Orleans, La.—Manufacturing.—It is stated that a Chicago manufacturing company, represented by Dan F. Carter, contemplates establishing branch plant in New Orleans. Mr. Carter is registered at the New Denechaud Hotel, New Orleans.

Newport, Ky.—Doors and Screens.—Higgin Manufacturing Co. has let contract for addition to factory recently noted; building to be three floors and basement, 67x87 feet; cost \$15,000; machinery not decided upon; product of plant, metal flyscreens and screen doors; Henry A. Faber, president.

Oklahoma City, O. T.—Clothing Factory.—C. G. Schellenberger, Clinton, Iowa, is endeavoring to organize company with \$250,000 capital stock to establish clothing factory in Oklahoma City. It is said that a building 50x100 feet, three stories high, will be required.

Paris, Texas.—Brick Works.—Paris Press Brick Co., 209 North Main street, recently reported incorporated, has secured plant already erected and will engage in the production of brick; capacity, 20,000 daily; president, J. N. Blake; vice-president and manager, E. Jenkins; secretary and treasurer, Wm. L. Jones.

Petersburg, Va.—Blank Form Manufacturing.—Adjustable Coupon Co. incorporated with \$2,500,000 authorized capital stock to deal in a patent of Charles Hall Davis for manufacturing blank forms of interest-bearing instruments of obligation with adjustable interest coupons attached. Charles Hall Davis is president, William A. Worth vice-president and Paul Pettit secretary-treasurer.

Rogers, Ark.—Teasdale Fruit & Nut Products Co. is about to begin operation of its plant, manufacturing and packing fruit and nut products, especially evaporated apples and apple juice; will install several electric motors. A. S. Teasdale is president, W. L. Marsh vice-president and John Teasdale treasurer.

Royse City, Texas.—Flour Mill.—Royse Milling & Light Co. will rebuild burned plant; new building to be of frame, four stories high, and is under construction. Machinery to cost about \$5000 will be installed for milling flour, meal, chops, etc.; daily capacity 60 barrels.

Sapulpa, I. T.—Glass Factory.—J. C. Madden & Sons Company, recently reported to establish glass factory, will erect and equip the following buildings: Office, brick, 60x30 feet; storehouse, frame, 35.5x150 feet; box factory, frame, 50x150 feet; warehouse, frame, 80x150 feet; enameling plant, 80x100 feet; main factory, corrugated, 80x125 feet; cost of buildings \$30,000; cost of machinery \$30,000. Plant will produce flint-glass bottles; daily capacity 425 gross, assorted. Officers are: J. C. Madden, Sr., president; Wm. C. Schmidt, vice-president; J. C. Madden, Jr., secretary-treasurer.

Sheffield, Ala.—Fertilizer Factory.—Southern Cotton Oil Co., Dr. E. B. Wright, manager, will erect building 54x86 feet to be equipped for manufacturing all grades of commercial fertilizer. Plans and specifications have been prepared and bids will be received at once.

Sherman, Texas.—Wire-fence Factory.—J. M. Cantrell, Adrian, Mich., is considering establishment of wire-fence factory in Sherman.

St. Louis, Mo.—Folding-box Manufacturing.—Winter-Langeneckert Folding Box Co. incorporated with \$15,000 capital stock by Julius Merz, Robert Merz, Edward C. Winter, Henry W. Langeneckert and others.

St. Louis, Mo.—Portland-cement Plant.—Continental Portland Cement Co., D. A. Marks, president, is having plans prepared by W. A. Tyrrell, 620 Chestnut street, for erection of proposed Portland-cement plant; will erect three buildings, 96x100 feet, 75x40 feet and 96x234 feet; one and two stories; steel frame, sheet and structural iron work; corrugated-iron roofing; electric lights; cost of erection and equipment about \$1,200,000. Company was reported incorporated in June with \$3,500,000 capital stock; offices in the Benoit Building.

St. Louis, Mo.—Bakery.—Master Bakers' Bakery Co., Merchants' Laclede Building, will erect \$25,000 bakery; ordinary construction; two stories; 135.6x84 feet; architect, J. L. Wee, 40 Commercial Building; secretary, Mr. Kortjohn.

St. Louis, Mo.—Plano Factory.—Val Reis Plano Co. incorporated with \$100,000 capital stock by Val Reis, Charles A. Smith, Clifford C. Mudge, Alexander Reis and others.

Tallapoosa, Ga.—Glass Works.—Tallapoosa Glass Manufacturing Co. incorporated, with Justin C. Jackson, president and treasurer;

J. F. Hinckley, vice-president, and George M. Greely, secretary. Company has perfected plans and will begin operations in September. Mr. Greely was mentioned in July as having purchased the Dixie Glass Works.

Union, Mo.—Tobacco Pipes.—National Cob Pipe Works, lately reported incorporated, will establish plant for manufacturing corn-cob tobacco pipes; to erect main building 40x140 feet at cost of \$3800 and install equipment of machinery, the latter not purchased yet; Charles P. Reinhard, general manager; Gust Siem, engineer in charge; T. N. Reinhard, architect in charge.

Wilmore, Ky.—Glass Works.—Glass Milling Co. will be incorporated by J. H. Glass (president), W. B. Glass, R. J. Curd and John R. Williams to succeed the Glass Milling Co. Company will erect building 40x185 feet, which, with machinery will cost \$30,000, and elevator with storage capacity of 75,000 bushels.

ROAD AND STREET IMPROVEMENTS

Anniston, Ala.—City has rewarded contract to John Bigler at 32 cents per square yard for paving sidewalks on Noble street, Wilmer, Quintard and Leighton avenues.

Ardmore, I. T.—City will vote September 24 on issuance of \$20,000 of bonds for street improvements. (See item under "Water-works.") Address The Mayor.

Gastonia, N. C.—Atlantic Bitulithic Co., 413 Mutual Building, Richmond, Va., has contract for 10,000 square yards of bitulithic pavement on Main street; engineer in charge, S. C. Cornwell.

Georgetown, S. C.—Georgetown County Commissioners have appropriated \$10,000 for improving main public highways leading into Georgetown.

Greeneville, Tenn.—Killion, Turner & Co., Jasper, Tenn., have contract for road improvement work, amounting to about \$50,000. Bids called for grading about 50 miles and macadamizing or graveling about 40 miles of road; E. C. Brown, engineer in charge. (Recently mentioned.)

Guthrie, O. T.—City has voted \$10,000 of bonds for improvement of streets, including bridging of Cottonwood avenue on 6th and 9th streets. Address The Mayor. (See item under "Water-works.")

Hattiesburg, Miss.—Improvement Committee has recommended that proposition from R. C. Huston be accepted, whereby Mr. Huston agrees to construct sanitary and storm sewers, curbs and gutters and do street paving, together with all appurtenances to sewers and paving, for \$7500, provided he is awarded entire contract. Report has been accepted. School Committee report on sidewalks, awarding contract to Southern Cement Building Material Co. at .1240 per square foot, was accepted and approved. Bid called for laying concrete walks around school buildings in Hattiesburg; J. H. Putnam, City Engineer; J. P. Williams and E. Hill, Improvement Committee. (Referred to recently.)

Jacksonville, Fla.—Georgia Engineering Co., Frank R. Clark, president, Augusta, Ga., has contract for paving Adams street at \$1.69 per square yard. Proposals called for grading and then laying about 6000 square yards of vitrified bricks or blocks, furnishing and placing about 2576 linear feet of stone curbing and 10 circular cornerstones of a radius of six feet; work to be completed within 60 days. P. A. Dignan, chairman Board of Public Works.

Jasper, Ala.—City will pave sidewalks with cement and curb same with cement blocks. Proposals are invited; G. H. Guttery, Mayor; L. M. Smith, City Clerk.

Lenoir, N. C.—Lenoir & Blowing Rock Turnpike Co. incorporated with \$125,000 capital stock by C. V. Hinkle, J. M. Bernhardt, Charles A. Hiatt and others to build a turnpike from Lenoir to Blowing Rock, thence to Virginia or Tennessee line. (Recently mentioned.)

Marshall, Texas.—J. W. Maxey, Houston, Texas, has been engaged as supervising and consulting engineer in charge of paving three streets with bitulithic; cost, \$85,000.

Meridian, Texas.—City has issued \$8000 of bonds for street improvements, etc. Address The Mayor. (See item under "Bridges, Culverts, Viaducts, etc.")

Mobile, Ala.—City has awarded contract to Brandon & Son for second sidewalk improvement venture, embracing about 724 square yards, at \$1.28 per square yard, and for fourth venture, embracing 629.7 yards, at \$1.18 per square yard; to Koolman & Co. for third venture, embracing 749.8 square yards, at \$1.15 per square yard.

Wheeling, W. Va.—City will award con-

tract September 9 for grading and concrete masonry for reconstructing Top Mill road; C. B. Cooke, City Engineer. (Recently mentioned.)

SEWER CONSTRUCTION

Ardmore, I. T.—City will vote September 24 on issuance of \$25,000 of bonds for constructing two septic tanks. (See item under "Water-works.") Address The Mayor.

Canton, Miss.—City will construct system of house sewers complete, approximately seven miles of 18-inch to 6-inch-pipe sewers. Bids will be opened September 19 for materials and labor; O. S. Miller, Mayor; W. G. Kirkpatrick, engineer, Jackson, Miss.

Clinton, O. T.—Clinton Sewer Co. incorporated by A. Lacy, T. J. Nance, James C. Davis and others.

Fayetteville, Ark.—City has awarded contract to C. W. Watson & Co., St. Louis, Mo., for construction of sewer system mentioned in February; contract price \$71,376.60; engineers, Burns & McDonnell, Scarritt Building, Kansas City, Mo.

Fort Worth, Texas.—City Commission has decided to construct storm sewer. According to present plans, sewer will be laid from East Front street, at a depth of 10 feet, to the river, which is about 60 feet below level of street; approximate cost, \$75,000.

Guthrie, O. T.—City has voted \$30,000 of bonds for construction of storm-water sewer and \$10,000 for construction of main sanitary sewers. Address The Mayor. (See item under "Water-works.")

Hattiesburg, Miss.—Improvement Committee has recommended that proposition from R. C. Huston for constructing sanitary and storm sewers, etc., be accepted. (See item under "Road and Street Improvements.") J. H. Putnam is City Engineer.

Lancaster, S. C.—City is considering construction of sewerage system. (See item under "Water-works.") Address The Mayor.

Muskogee, I. T.—City will vote September 19 on issuance of \$80,000 of bonds for extension of sewerage system. Address The Mayor. (See item under "Water-works.")

Paragould, Ark.—The W. K. Palmer Company, Kansas City, Mo., has contract to construct sewerage system in Paragould to cost about \$40,000. Company will do engineering and superintend work, for which it will receive 4½ per cent. of cost of system. Bonds will be issued.

TEXTILE MILLS

Albany, Ga.—John A. Retjeman and associates propose organizing the company noted last week with capital stock of \$200,000. They plan to build a mill of 10,000 spindles and 300 looms for manufacturing print cloth, and expect to determine all details by October 1.

Atlanta, Ga.—National Duck Mills, recently incorporated with capital stock of \$500,000, has organized with George P. Howard president, James Ecott vice-president and W. L. Byer (of Lagrange, Ga.) secretary. Company will operate plant for manufacturing cotton duck, daily output at the start to be from 5000 to 10,000 pounds.

Columbus, Ga.—Topsy Hosiery Mills, mentioned last week, will not build an addition, but will add about 50 knitting machines.

Columbus, Ga.—Perkins Hosiery Mills will add about 80 knitting machines to present equipment; it is understood that the contracts have been closed and a portion of the machinery delivered.

Guthrie, O. T.—Wm. H. Coyle, Jack Tearney and associates will form company to establish mill for manufacturing cotton duck and other similar cloth.

Jamesville, N. C.—Boyle Manufacturing Co., lately mentioned under this classification, is not a textile enterprise. (See under "Lumber-manufacturing Plants.")

Johnson City, Tenn.—Watauga Hosiery Mills has increased capital stock from \$10,000 to \$20,000.

Leesville, S. C.—Leesville Cotton Mills incorporated with capital stock of \$100,000, and will build plant, construction to begin at once; R. B. Jennings of Columbia, S. C., president and treasurer; J. R. Bouknight, vice-president, and W. G. Duncan, secretary, both of Leesville.

Maxton, N. C.—G. B. Patterson, L. T. Cook, T. O. Evans and S. B. McLean propose organizing \$100,000 stock company to build 5000-spindle cotton-yarn mill.

Montmorenci, S. C.—Woodward, Bell & Taylor are reported as planning to establish a knitting mill for operation by electricity.

New London, N. C.—Richard M. Eames, Jr., of Salisbury, N. C., is reported as negotiating with Pennsylvania capitalists rela-

tive to forming company to build a large cotton mill at New London; electricity to be the motive power.

Oakwood, S. C.—C. E. Hallman will establish knitting mill to be operated by water-power transmitted direct.

Oella, Ga.—J. A. J. Henderson and associates propose organizing company to build cotton mill; \$60,000 has been subscribed.

Radford, Va.—Radford Knitting Mills incorporated with capital stock of \$30,000 and privilege of increasing to \$50,000; W. R. Jordan, president; J. M. Senner, vice-president, and W. H. Galloway, secretary-treasurer.

Randleman, N. C.—Company will be organized with capital stock of \$100,000 to install equipment for spinning hosiery and warp yarns. Building has been secured. People's Savings, Loan & Trust Co. can probably give information.

Savannah, Ga.—Savannah Mills reported as to install equipment for production of knit goods.

Stony Point, N. C.—Stony Point Manufacturing Co. is reported as to add 1000 spindles; present equipment, 3000 spindles.

Talladega, Ala.—Mumford Cotton Mills incorporated with capital stock of \$50,000 by B. F. Camp, N. C. Camp, D. B. Harris, F. F. Newman and E. N. King.

Tuscaloosa, Ala.—Tuscaloosa Mills will rebuild its cotton-manufacturing plant recently destroyed by fire at a loss of \$300,000; equipment was 20,000 spindles and 400 looms. Company is installing electric power and discarding steam power in its knitting mill.

Weldon, N. C.—Shaw Cotton Mills will erect 50x150-foot mill building, two stories high, of brick, and install 5129 spindles, with preparatory machinery, for manufacturing two-ply yarns, Nos. 24 to 36. Contract awarded to Mason Machine Works of Taunton, Mass., for machinery, and that company furnishes engineer in charge. Will use gas producer and gas engine for power; contract about closed. Shaw Cotton Mills was reported organized lately, with W. T. Shaw, president, and capital stock of \$100,000.

Walhalla, S. C.—Orenee Knitting Mill, lately reported as increasing capital from \$15,000 to \$30,000, will double present equipment of 26 knitting machines; 25 of the new machines to knit half-hose; all other equipment to knit full hose. Contracts have been awarded for new equipment. Company contemplates building mill to spin the yarns consumed in its knitting operations. James M. Moss is treasurer.

Weatherford, Texas.—Weatherford Cotton Mills contemplates doubling present equipment of 4800 spindles; product is yarns.

Zircolia, N. C.—Green River Manufacturing Co., J. O. Bell, secretary-treasurer, will build the mill noted last week in connection with Mr. Bell's name; to have 7500 spindles. Full particulars previously noted under Hendersonville, N. C.

WATER-WORKS

Ardmore, I. T.—City will vote September 24 on issuance of \$30,000 of bonds for repairing water-works dam and pumping station, \$30,000 for street improvements and \$25,000 for constructing two septic tanks. Address The Mayor.

Berlin, Md.—City is prepared to grant franchise for water plant. Orlando Harrison is Mayor. (See item under "Electric-light and Power Plants.")

Blue Ridge, Ga.—City will vote on issuance of \$30,000 of bonds for construction of water-works. Address The Mayor.

Brownsville, Texas.—Henry C. Ullen, Jr., American Light & Power Co., Kansas City, Mo., has contract at \$65,940 for construction of water-works and electric-light plant. (W. P. Bullock, Kansas City, Mo., mentioned in July as engaged to prepare plans, specifications and estimate cost of water-works and electric-light system, for which \$70,000 of bonds would be voted.)

Columbiana, Ala.—T. Gordon is planning to construct water-works and electric-light plant.

Concordia, Mo.—City will vote on issuance of bonds for building additional pumping station. Address The Mayor.

Fort Barrancas, Fla.—United States Government has plans and specifications for water-works, including construction of 300,000-gallon reinforced concrete reservoir, installation of steam pump and steam air compressor and extension of mains. Proposals are invited. For information address Lieut. A. L. Rhoades, Quartermaster.

Guthrie, O. T.—City has voted issuance of \$36,000 of bonds as follows: \$40,000 for improvement of water plant and extension of mains; \$30,000 for construction of storm-water sewers; \$10,000 for construction of

main sanitary sewers; \$10,000 for improvement of streets, including bridging of Cottonwood avenue on 6th and 9th streets, and \$6000 for purchase of additional fire-department equipment. Address The Mayor. (Recently mentioned.)

Jackson, Ga.—City will vote September 7 on issuance of \$10,000 water-works extension and improvement bonds. Address The Mayor.

Lancaster, S. C.—City is considering construction of water-works, sewerage system and electric-light plant. Mr. Sompayrac, Columbia, S. C., has submitted estimates as follows: Water-works, \$25,000; sewerage system, \$12,000, and electric-light plant, \$6000. Address The Mayor.

Lawrenceburg, Tenn.—City will award contracts for materials and labor for constructing proposed hydro-electric water-works and lighting plant. Bids will be opened September 13; Walter G. Kirkpatrick, engineer, Jackson, Miss.*

Lindsay, I. T.—City has voted \$25,000 of bonds for construction of water-works. Address The Mayor.

Mountain View, O. T.—T. A. Dutch, Kansas City, Mo., has contract to construct water-works at Mountain View; work will soon begin; bond issue of \$20,000 is available; A. E. Stinson, Mayor; W. P. Bullock, engineer. (Referred to in July.)

Muskogee, I. T.—City will vote September 10 on issuance of \$120,000 of bonds for construction of water-works and \$80,000 for extension of sewerage system. Address The Mayor.

Temple, Texas.—City will vote October 2 on issuance of bonds for acquisition of present water-works plant. Election will decide question of assuming \$60,000 of bonds now outstanding, with plant as security, and issuance of \$90,000 of bonds, \$60,000 of which will be utilized in acquiring remaining assets of water-works company and \$30,000 for improvements. Address The Mayor. (Recently mentioned.)

Texhoma, O. T.—Texhoma Electric Light, Water & Ice Co. incorporated by W. A. Turner and others. (See item under "Electric Light and Power Plants.")

Weleetka, I. T.—Weleetka Light & Power Co. contemplates building addition and making improvements to water-works system; understood that a 200-kilowatt dynamo will be installed; D. F. Campbell, manager.

Wheeling, W. Va.—City Water Board has not decided on character and details of water-works improvements contemplated and referred to recently. The betterments are contingent on the proposed bond issue for \$500,000, which will be voted on during the fall. Charles B. Cooke, City Engineer, is the engineer in charge.

WOODWORKING PLANTS

Arkansas City, Ark.—Delta Coopers Co., reported incorporated in July with \$25,000 capital stock, is operating established plant producing about 50,000 cut hoops per day. Company is installing stove plant and will make specialty of 28½ inch and 30-inch cottonwood staves. C. E. Murray, Decherd, Tenn., president; J. H. Powell, vice-president, and A. Kimball, secretary-treasurer, both of Arkansas City.

Boulevard, Va.—Virginia Land & Improvement Co., Williamsburg, Va., is reported to build veneer factory at Boulevard.

Centerville, Tenn.—Buckeye Hub & Spoke Co. is reported to build plant for manufacturing hubs and spokes.

Dermott, Ark.—American Land, Timber & Stave Co. is rebuilding recently burned stave plant. H. Katz, offices in Tennessee Trust Building, is in charge of territory.

Durham, N. C.—Hardwood Novelty Co., reported incorporated in May, organized with R. G. Jones, president; J. E. McDowell, secretary-treasurer, and A. Crumpacker, superintendent; will erect two-story 40x100 foot frame building and install machinery at cost of \$5000. To manufacture store and office fixtures and furniture, mantels, etc., from hardwood.

Greenwood, Miss.—Nash & Dunn will install drykiln and finishing plant for producing kiln-dried and jointed staves in their new factory, now being equipped for manufacturing tight barrel staves; daily capacity, 15,000 finished staves.

Hampton, Va.—Peninsula Barrel & Package Co. incorporated with \$15,000 capital stock to manufacture barrels, boxes, etc.; H. S. East, president; Frank M. Boggs, secretary, and Horace S. East, treasurer.

Joplin, Mo.—Joplin Casket Co., reported incorporated in July with \$10,000 capital stock, is erecting casket factory; two stories; 60x150 feet; pressed brick and Carthage stone; solid concrete foundations; J.

A. Wilson, president; Burt W. Lyon, vice-president and secretary; J. A. Spencer, treasurer, and A. F. Campbell, superintendent.

Lenoir, N. C.—Blue Ridge Bending Co., recently reported incorporated with \$50,000 capital stock, will manufacture bent rims for wagons, carriages, farm implements, tables, etc.; buildings will be erected at cost of about \$7000; main building to be 50x100 feet; president, J. F. Robb; secretary and treasurer, J. R. Powell; manager, John W. Hicc.*

Louisville, Ky.—Falls City Table Co. incorporated by T. G. Dunlap, H. L. Rose and John W. Hardin.

Mobile, Ala.—Coffin and Casket Factory.—W. T. McGowan is conferring with Eastern capitalists relative to establishing coffin and casket factory at some point in the South, possibly Mobile.

Savannah, Ga.—Southern Hardwood Manufacturing Co.'s plant has been sold to new company; name to be retained; plant will be enlarged.*

BURNED

Baltimore, Md.—Gibbs Preserving & Candy Co.'s plant at 231S-2322 Boston street; loss about \$20,000.

Bennettsville, S. C.—Presbyterian congregation's church building; loss \$30,000; Dr. Bunyan McLeod, pastor.

Byron, Ga.—Cotton ginners at Byron owned by Brown & Green, Powersville, Ga.

Campbell, Ark.—Thomas Morrison's sawmill; loss \$2000.

Chattanooga, Tenn.—J. B. Kennedy's bakery at 1324 McCallie avenue.

Danville, Ky.—R. E. Goddard's residence; loss \$10,000.

Hochheim, Texas.—William Jaeger's cotton gin; loss \$5000.

Louisville, Ky.—Courier-Journal Company's five-story office building and printing plant; loss reported at \$200,000; Bruce Haldeman, president; also printing plant and offices of the Evening Times Company, located in same structure. Damage to linotype machines and printing presses said to have been slight, as they were located in a reinforced-concrete section of building.

Louisville, Ky.—Tinsley-Mayer Engraving Co.'s plant; total loss on equipment about \$5000; E. H. Tinsley, president.

Memphis, Tenn.—Florence Pump & Lumber Co.'s shed No. 16; loss \$15,000.

Montgomery, Ala.—Cudahy Packing Co.'s smokehouse at 322-24 Lee street; loss \$5000.

Oxford, Miss.—Lighting plant at University of Mississippi; loss \$10,000.

Petersburg, Va.—L. M. Liebert's flour mill.

Prestonville, Ky.—Henry Crouch's tobacco barns; loss \$15,000.

BUILDING NOTES

*Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery, Proposals and Supplies Wanted."

Ablene, Texas.—Church.—Baptist congregation has had plans and specifications prepared for erection of edifice; two stories and basement; pressed brick; auditorium, seating capacity 1800; cost \$50,000. Address The Pastor.

Alexandria, La.—Library.—Caldwell Bros., Abbeville, La., have contract to erect library building; 64x50 feet; light stone-color mortared pressed brick; concrete finish; metal cornice; red tile roof; vestibule floor, tile; hot-air or steam heat; contract price \$12,511.10, including heating, plumbing, lighting, etc. Plans have been prepared by Crosby & Henkle, New Orleans, La.

Alba, Texas.—School Building.—Bids will be received for building and furnishing two-story brick school building to cost \$8500. Address Box 167.

Ansted, W. Va.—Bank Building.—New banking company, incorporated by W. N. Page, R. T. Hubbard, Jr., and others, will erect concrete-block bank building.

Ardore, I. T.—High-school Building.—City will vote September 24 on issuance of \$25,000 of bonds for erection of school building. Address The Mayor.

Athens, Tenn.—Business Building.—A. N. Shearman will erect business building; three stories; concrete; mill construction; 21x134 feet; water-power elevator; bids to be opened September 10.*

Atlanta, Ga.—Apartment-house.—J. T. Hall, Jr., will erect apartment-house to cost about \$18,000; Norman & Falkner, architects; D. C. Allen, contractor.

Baird, Texas.—Bank Building.—Home Na-

tional Bank will erect two-story bank building.

Baltimore, Md.—Postoffice.—Treasury Department, Washington, D. C., James Knox Taylor, supervising architect, has distributed plans for proposed addition to postoffice building for which \$125,000 has been appropriated; structure will be one story, with basement and subbasement, 102x83.9 feet; steam heat; electric wiring; two electric elevators, etc.; system of plumbing will be installed in present building in connection with that required for new structure, for which Newport Heating, Tinning and Plumbing Co. of Newport News, Va., has contract; estimates to be submitted to the supervising architect October 7. (Call for proposals lately noted.)

Baltimore, Md.—Stores.—Safe Deposit & Trust Co., 13 South street, has commissioned Mottu & White, architects, Professional Building, North Charles street, to prepare plans for the erection of three stores at 4 and 6 North Howard street; structure will be 16x57 feet, one or two stories high.

Baltimore, Md.—Dwelling.—J. M. Dilworth, 121 Mercer street, has purchased lot on Windsor avenue, 75x100 feet, to erect residence.

Baltimore, Md.—Store.—John Lange has awarded contract to T. B. Stanfield & Son, 109 Clay street, to erect proposed store building at 525½ and 527 North Gay street, to cost about \$7500; John Freund, Jr., architect, 210 East Lexington street.

Baltimore, Md.—Armory.—Mottu & White, architects, Professional Building, North Charles street, are preparing plans for proposed alterations and remodeling of structure at 1112 Madison avenue for the Fifth Regiment Veteran Corps, 9 East Franklin street, to cost about \$8000. (Recently referred to.)

Baltimore, Md.—Dwellings.—James H. Trainor will erect five two-story brick dwellings on north side of Gold street between McCulloh street and Druid Hill avenue, to be 15x52.6; John R. Forsythe, architect, 232 St. Paul street.

Baltimore, Md.—Dwellings.—James H. Trainor has purchased site and will erect seven two-story brick dwellings at the southwest corner of McCulloh and Prestant streets; four to be 13.9x55 feet and three to be 13.6x44 feet; hot-water heating; gas and electric fixtures; sanitary plumbing, etc.; cost about \$25,000; John R. Forsythe, architect, 232 St. Paul street.

Baltimore, Md.—Clubhouse.—Architects and Builders' Club, recently incorporated, has leased five acres of land on Middle river and will erect proposed clubhouse on the grounds. Structure will be of colonial design, with wide porches and large fireplaces; J. Edward Laferty, architect, 11 East Pleasant street; Arthur F. West, contractor, St. Paul street and Merryman's lane. It is also intended to erect a number of cottages.

Baltimore, Md.—Office Building.—Marshall Winchester, 1214 Continental Trust Building, Calvert and Baltimore streets, has purchased site at southwest corner of St. Paul and Fayette streets and will erect one-story office building.

Baltimore, Md.—Bank Building.—James W. Crook has awarded contract to Felix McGlinn, contractor, 827 East Chase street, to erect bank building at O'Donnell and Potomac streets to be occupied by the Canton branch of Provident Savings Bank. Structure will be 21x40 feet, of brick and granite, with Indiana limestone trimmings; steam heat, sanitary plumbing, etc.; cost about \$4000.

Baltimore, Md.—Dwellings.—James W. Crook has awarded contract to Felix McGlinn, 827 East Chase street, to erect two two-story dwellings, 15x64 feet, on O'Donnell street near Potomac street; gas and electric fixtures; sanitary plumbing, etc.

Baltimore, Md.—Dwellings.—Kennedy estate will erect 98 two-story dwellings on Kennedy avenue, north of 29th street, to cost about \$225,000; Jacob F. Gerwig, architect, 11 East Lexington street; Charles H. Gerwig, contractor, 809 Fidelity Building, Charles and Lexington streets.

Baltimore, Md.—Dwellings.—Joseph H. Peutz has had plans prepared for 44 two-story dwellings to be erected on Guilford avenue, between 24th and 25th streets, 16 and 17 feet by 63 feet, and 10 three-story dwellings to be erected on Guilford avenue, between 26th and 27th streets, 17x63 feet. Structures will cost about \$150,000; Jacob F. Gerwig, architect, 11 East Lexington street.

Baltimore, Md.—Store Building.—Safe Deposit & Trust Co., 9-13 South street, will erect new store building at northwest corner Charles and Clay streets. Plans and specifications are in course of preparation.

Baltimore, Md.—Apartment-house.—Gilbert & Doyle, 301 St. Paul street, have commis-

sioned John R. Forsythe, architect, 232 St. Paul street, to prepare plans and specifications for remodeling and construction of an addition to large dwelling in Walbrook. Electric wiring and fixtures, sanitary plumbing and heating system will be installed.

Batesburg, S. C.—Bank and Office Building. First National Bank has purchased site, 116x25 feet, on which to erect bank and office building; two stories; either of brick or granite.

Beatty, Ark.—Lodge Building.—Beatty Lodge of Masons, W. J. Hemming, secretary, will erect lodge building; details not determined.

Beaumont, Texas.—Building.—Mrs. Ella C. Call will erect six-story building, 120x120 feet. (Mrs. Call was recently reported to erect 40 to 50 dwellings costing from \$1000 to \$5000 each.)

Beeville, Texas.—Warehouse.—Farmers' Union Warehouse Co. incorporated with \$7000 capital stock by E. B. Uzzell, Paul Jensen and B. B. Atkins.

Bellevue, W. Va.—Passenger and Freight Station.—Baltimore & Ohio Railroad Co. will erect station recently referred to at cost of \$20,000; architect, M. A. Long, Baltimore, Md.; contractor, Enterprise Construction Co., Elkins, W. Va.; freight station, 30x100 feet; passenger station, 30x90 feet; ordinary construction; direct-steam heat; electric lighting.

Bells, Texas.—School Building.—Bids will be received at office of Dr. J. A. Swafford until September 10 for erection of two-story brick school building. Plans and specifications can be seen at First National Bank of Bells and at office of Soarger & Peters, architects, Bonham, Texas; certified check, \$500; usual rights reserved.

Birmingham, Ala.—Hotel.—L. E. Walker is preparing plans for hotel; 80x67 feet; brick and stone; steam heat; cost \$19,500.

Ronne Terre, Mo.—Buildings.—F. H. Dearing will erect buildings at cost of \$9000 to \$7000; two stories and basement; 20x40 feet and 17x20 feet; frame; vacuum steam heat; electric lighting; architect, W. A. Lucas, St. Louis, Mo.; contractor, McCarthy Construction Co., Farmington, Mo.

Boonville, Mo.—Courthouse.—Reported that an election will soon be held to vote \$100,000 courthouse bonds. Address County Commissioners.

Brackettville, Texas.—School Building.—School Board, Charles Kartes, president pro tem., will erect \$20,000 school building. Plans and specifications will be received until September 10.

Brewton, Ala.—Lodge Building.—Masonic Temple Co. will erect lodge building; three stories and basement; 40x90 feet; brick; steam heat; electric lighting; cost \$10,000 to \$15,000; date of opening bids not decided; architect not named. G. W. L. Smith may be addressed.

Bristol, Tenn.—Residence.—John W. Price has purchased site with frontage of 72 feet on which to erect residence.

Cameron, I. T.—Bank Building.—Farmers' & Merchants' Bank, Ed McKenna, principal promoter, is reported to erect bank building.

Cameron, I. T.—Bank Building.—Bank of Cameron, S. H. White, president, is reported to erect bank building.

Canton, N. C.—Bank Building.—New banking company, organized with Alden Howell, Waynesville, N. C., president, will erect bank building.

Cape Girardeau, Mo.—Hotel.—J. W. Phillips and associates will erect hotel; six stories; steam heat; gas and electric lighting; plans by J. B. Legg, Missouri Trust Building, St. Louis, Mo.

Cedar Hill, Texas.—School Building.—School Board has adopted plans by J. S. Moad, Moad & Skellvig, Texas Building, Dallas, Texas, for erection of school building; brick and stone; cost about \$14,000. Bonds amounting to \$10,000 have been issued.

Chattanooga, Tenn.—Church.—Highland Park Methodist Church, Rev. Erwin Omohundro, pastor, is having plans prepared by R. H. Hunt for erection of edifice; brick; stone trimmings; cost \$25,000.

Chattanooga, Tenn.—Postoffice and Courthouse.—All bids for erection of addition to postoffice and courthouse building at Chattanooga have been rejected. Changes will be made in plans and new bids invited; James Knox Taylor, Treasury Department, Washington, D. C., supervising architect.

Childersburg, Ala.—Warehouse.—Coosa River Spinning Co. will open bids September 14 for erection of warehouse according to plans and specifications on view at offices of the architects, Knox, Dixon & Burr, Talladega, Ala. For information apply to architects or to D. L. Lewis of Coosa River Spinning Co., Sycamore, Ala.

Clarksburg, W. Va.—Church.—Goff M. E. Church has awarded contract to Andrew Watson, Salem, W. Va., at \$64,440 for erection of edifice; plans by Wilbur T. Mills, Columbus, Ohio; brownstone; 124x88 feet.

Cleburne, Texas.—Warehouse.—Cleburne Farmers' Union Warehouse Co., reported incorporated in July with \$5000 capital stock by N. T. Jones and others, has awarded contract to E. J. Zimmerman for erection of proposed warehouse; 100x150 feet; cost, \$3000.

Cordale, Ga.—Masonic Temple.—Farmers & Merchants' Bank will erect lodge building mentioned in July; building to be used by Cordelia Lodge No. 296, A. F. & A. M., of which W. T. Cheves is secretary; architects, Lockwood Bros., Columbus, Ga.

Corrigan, Texas.—School Building.—Corrigan Independent School District will erect at cost of \$7500 the school building for which bonds and special tax were recently voted. L. E. Locke, secretary pro tem., may be addressed.

Corpus Christi, Texas.—Bank Building.—First State Bank will open bids September 14 for erection of bank building; certified check, \$1000. Plans and specifications can be seen at office of bank in Corpus Christi or at office of Harvey L. Page Company, architects, 331 West Woodlawn avenue, San Antonio, Texas; usual rights reserved; Vincent Bluntzer, president.

Corpus Christi, Texas.—Union Depot.—Mexican National, St. Louis, Brownsville & Mexico and San Antonio & Aransas Pass railroads are reported to build union depot. E. C. Burgess, chief engineer St. Louis, Brownsville & Mexico Railway, can probably give information.

Corsicana, Texas.—Church.—Bids will be opened September 16 in office of C. S. West, chairman building committee, Corsicana, for erecting brick church building; plans and specifications on file in office of Sparger & Peters, architects, Bonham, Texas, and with C. S. West, Corsicana; certified check, \$500, payable to C. S. West; usual rights reserved.

Dallas, Texas.—Office Building.—C. E. Brown, recently mentioned as having purchased the North Texas Building, is having plans prepared by Lang & Wittichell for remodeling the structure; improvements to include new steam-heating plant; rewiring for system of electric lights and fans; corridors to have tile flooring and marble wainscoting; new and larger elevator. It is also stated that Mr. Brown has about concluded the purchase of site 250x425 feet on which to erect residence costing \$20,000.

Denmark, S. C.—Church.—Trustees of M. E. Church South have awarded contract to W. M. Warren, Branchville, S. C., for construction of church edifice mentioned in August; plans by Wilson, Sompayrac & Urquhart, Columbia, S. C.; brick building, 38x58 feet, with classrooms; hot-air heat; acetylene gas lighting; cost, \$8500.*

De Ridder, La.—Hospital.—Long-Bell Lumber Co., Kansas City, Mo., will erect hospital at De Ridder; two stories; frame; electric lights; baths; cost between \$15,000 and \$18,000.

Ellisville, Miss.—Warehouse.—Farmers' Union has awarded contract to J. H. Myer, Houston, Texas, for erection of warehouse in Ellisville.

Florence, Ala.—Store Building.—R. L. Glenn has awarded contract to John Madry and Jesse Marsh for erection of store building; brick, with pressed-brick front; two stories with basement; 66x125 feet; total cost, \$16,000. Contract for 500,000 brick has been awarded to a Nashville firm.

Fort Worth, Texas.—Coliseum.—Sealed bids will be received until September 16 for all brick work, mill work, plastering, structural steel, frame work for windows and skylights, glass, galvanized-iron work, reinforced concrete work, concrete work, plumbing, cast-iron and such other work necessary for completion of Coliseum Building in North Fort Worth. It is desired to let the above work to one bidder. All excavation and foundation work has been completed. Large steel trusses and roof material have been contracted for. Specifications and plans may be seen at office of general manager Fort Worth Stock-Yards Co., Address W. B. King, general manager Fort Worth Stock-Yards Co., North Fort Worth, Texas.

Florence, Ala.—Warehouse.—Farmers' Union Warehouse Co. incorporated with \$10,000 capital stock to erect cotton warehouse. Dr. J. M. Pearson is president and T. F. Johnson secretary-treasurer.

Fort Myer, Va.—Drill Hall.—Sealed proposals in triplicate will be received at office of Quartermaster until September 16 for addition to the cavalry drill hall; certified check or surety bond for 10 per cent. of amount; plans and specifications on appli-

cation; usual rights reserved; Capt. B. B. Hyer, Constructing Quartermaster.

Fort Smith, Ark.—Hotel.—Manhattan Construction Co., New York, N. Y., has contract at \$187,000 to reconstruct the New Sebastian Hotel. Foundations have already been laid and construction work will begin within 10 days. J. C. Wyatt will be manager. Cost of structure, complete and furnished, \$250,000.

Gaffney, S. C.—Cotton Warehouse.—Farmers' Warehouse Co. of Cherokee county will be incorporated with \$10,000 capital stock to erect cotton warehouse.

Gainesville, Ga.—Residence.—J. R. Nance has purchased site, 75x155 feet, on which to erect residence.

Galveston, Texas.—Hotel.—M. Cohn, Sam Fridner and Louis Sigel will erect hotel; four stories; 75x120 feet; stucco work and concrete filling; fireproof; 100 rooms; four bathrooms on each floor; elevator; cost about \$40,000. Plans will be prepared by D. N. McKenzie.

Georgetown, Ky.—Skating Rink.—Company has been incorporated with \$10,000 capital stock by W. P. McNally, Catherine Harrison and Sarah O'Neill, all of Lexington, Ky., to build skating rink in Georgetown.

Goldshoro, N. C.—Union Station.—King Lumber Co., Charlottesville, Va., has contract, at \$55,520, for erection of proposed union passenger station for Goldshoro Union Station Co., to be used by Atlantic Coast Line, Norfolk & Southern and Southern Railway companies. Structure will be of brick, faced with buff brick and stone trimmings; tile roof; reinforced concrete floors; iron construction; main portion of building to be two stories high, with one-story extension on both ends; Granolithic walks will be laid and umbrella sheds erected over the railroad tracks. Plans prepared by Leitner & Wilkins, Wilmington, N. C. (Referred to recently.)

Gormanla, W. Va.—Bank Building.—First National Bank will erect \$5500 bank building; contractor, Harry F. Smith, Piedmont, W. Va.; architect, L. D. Gastelger, Dobbin, W. Va.; two-story-and-basement building; 20x20 feet; press brick; stone foundation; stone trimmings; natural-gas heating and lighting.

Groveton, Texas.—Hotel.—Groveton Hotel Co. incorporated with \$4500 capital stock by A. B. Locke, L. B. Atman, R. R. Robb and James A. Hill.

Halethorp, Md.—Residence.—Charles W. Woodford will erect cottage; 2½ stories; 10 rooms and baths; electricity and gas; hot-water heating system; John R. Forsythe, architect.

Hattiesburg, Miss.—Church.—Christian Congregation, lately reported as to build church, will expend about \$6000. Structure to be 44x44 feet; auditorium and Sunday-school room 24x28 feet; mill construction; hot-air heating plant; electric lighting fixtures; erection by day labor under supervision of pastor, M. F. Harmon; architect, R. E. Lee.

Hattiesburg, Miss.—Business Building.—Dr. Culpepper is having plans prepared by R. E. Lee for erection of business building; brick; 90-foot frontage; two stories.

Hattiesburg, Miss.—Warehouse.—R. E. Lee is preparing plans for three-story brick warehouse.

Helena, Ark.—Hotel.—Helena Hotel Co., G. H. Friberg, secretary, will erect hotel; two stories; 55x120 feet; brick, terra-cotta and stone; gas and electricity; cost, \$30,000.

Henning, Ark.—Warehouse.—Henning Farmers' Union Warehouse Co., recently reported incorporated with \$3000 capital stock, has elected J. D. Tarrant, president; W. J. Lankford, vice-president, and Thomas McPherson, secretary-treasurer.

Hillsboro, Texas.—Hotel.—Sowell Bros. have contract to erect proposed Wear Hotel; three stories high, including basement for heating purposes, laundry, etc.; first story to contain lobby with tile flooring; modern lighting and plumbing; electric fans; electric call bells and annunciator; steam-heating plant; electric lighting; 50 rooms; private fire protection provided by two standpipes standing from basement to roof, with hose and hose reels on each floor; exterior finished in gray brick and cement stone trimmings; walls of court on east side covered with asbestos stained shingles, gray-white; contract price \$34,000. Plans prepared by Sangunett, Staats & Hill, Wilson Building, Dallas, Texas; owner, Citizens' Hotel Co. (W. C. Wear and others reported in June as incorporating company to erect hotel.)

Hope, Ark.—Warehouse.—Farmers' Union Warehouse Co. incorporated with \$10,000 capital stock. L. A. Reece, president; N. R. Lewis, vice-president, and J. R. Gibson, secretary-treasurer.

Houston, Texas.—Theater.—G. H. Johnson

Realty & Construction Co., Holland Building, St. Louis, Mo., will erect theater at Houston; three stories; 70x115 feet; brick, stone, terra-cotta and reinforced concrete; gas and electricity; cost \$60,000.

Houston, Texas.—Courthouse.—Harris County courthouse will be erected at cost of \$500,000; architect will be chosen during September; it is proposed to erect fireproof building, 14x140 feet, with steam heat and electric lighting; two large passenger and one freight elevator to be installed; bids from architects have been asked; Geo. F. Horton, engineer in charge. (Preliminary plans, etc., mentioned in August.)

Howell, Ark.—Warehouse.—Howell Farmers' Union Cotton Warehouse Co. incorporated with \$5000 capital stock by J. R. Abernathy, W. H. Parker, S. V. Wood and others.

Hugo, I. T.—Business Building.—J. W. Davis has let contract for two-story business building, 75x110 feet.

Hugo, I. T.—Business Building.—R. L. Overstreet has let contract for two-story business building, 50x100 feet.

Hugo, I. T.—Office Building.—J. R. Clem and R. M. Connell have purchased lot at \$10,000 and will erect three or four-story office building, work to begin about October 1.

Jackson, Ala.—Bank Building.—Planters' Bank & Trust Co., Dr. W. P. Cannady, president, has awarded contract to J. S. Ballard for erection of bank building.

Jackson, Mo.—Church.—W. W. Taylor & Son have general contract to erect brick and stone edifice costing \$10,000 for the Lutheran congregation; W. B. Schafer, chairman building committee.

Jacksonville, Fla.—Apartment-house.—J. C. Halsema will erect apartment-house recently mentioned; plans and construction by owner; three-story brick; 46x86 feet; steam heat; electric and gas lighting; cost \$16,000.

Jewett, Texas.—Warehouse.—Board of Trade has concluded arrangements with James Bennett for erection of cotton warehouse; 66x100 feet; capacity, several hundred bales.

Joplin, Mo.—Theater.—G. H. Johnson Realty & Construction Co., Holland Building, St. Louis, Mo., will erect theater; three stories; 80x115 feet; gas and electricity; cost, \$70,000. Bids are now being received.

Kansas City, Mo.—Residence.—E. S. Horn has had plans prepared by C. B. Sloan for erection of residence; two and one-half stories; 52x60 feet; gas and electricity; cost \$18,000.

Kansas City, Mo.—Residence.—Raymond P. May has had plans prepared by C. B. Sloan for erection of residence; two stories and attic; 43x45 feet; gas and electricity; cost \$14,000.

Kansas City, Mo.—Fire Station and Veterinary Hospital.—Board of Public Works has approved plans by Root & Siemens for erection of fire station and veterinary hospital. Ordinance appropriating \$27,000 for the building has passed lower branch of Council.

Kansas City, Mo.—Church.—Grace Presbyterian Church has secured permit for erection of edifice; 70x115 feet; cut stone; cost \$30,000; C. A. Smith, Dwight Building, architect.

Kansas City, Mo.—Skating Rink.—Fredrick Rohankole and C. T. McCarthy will erect skating rink; area 25,500 square feet; outer rink 700 feet wide and inner rink 400 feet wide; balconies at either end, seating 1000; cost \$25,000.

Knox City, Texas.—Warehouse.—Farmers' Union will erect cotton warehouse.

Knoxville, Tenn.—Residence.—Samuel B. Luttrell has purchased site, 125x225 feet, at \$7000 on which to erect eight-room brick residence.

Knoxville, Tenn.—Store Building.—Ebb Doyle and Jack Adecock will erect two-story store building.

Knoxville, Tenn.—Stables.—Tennessee & Kentucky Horse & Mule Co., C. V. Henkle, Statesville, N. C., president, has awarded contract to the Borches-Wardrop Company for stockyards building. Plans have been prepared by L. S. Waters. Building will be 300x162 feet, of ordinary construction, with electric lighting; estimated cost, \$20,000 to \$30,000. (Mentioned in July and previously.)

Kosse, Texas.—Warehouse.—Farmers' Union Warehouse Co. incorporated by A. M. Nabors, O. W. Pope, J. B. Walker and others.

Latta, S. C.—School Building.—Contract will be awarded September 23 for erection of brick building for the Latta High School. Plans and specifications can be obtained from A. S. Manning, chairman of board at Latta, or Ernest V. Richards, architect, Bennettsville, S. C.; certified check, \$50, payable to A. S. Manning; usual rights reserved.

Laurens, S. C.—Bank and Store Building.—E. L. Hertzog, Spartanburg, S. C., has contract to erect bank and store building for the Enterprise Bank. Structure will be three stories, with double front; cost \$30,000.

Leesville, La.—Courthouse.—Office Jury of Vernon parish has decided to build courthouse costing \$100,000.

Madisonville, Ky.—Hotel.—Central Hotel Co. has been organized by C. H. Murphey (president) and associates to build the hotel lately mentioned; structure to be three stories high; 85x105 feet; brick and wood construction; tin roof; hot-water or steam heating plant; electric-lighting fixtures; elevator; cost \$20,000 to \$25,000; architects, Harris & Shopbell of Evansville, Ind.; contractors to be Wooten & Reynolds of Madisonville.

Marble Falls, Texas.—Warehouse.—Marble Falls Farmers' Union Warehouse Association incorporated by A. M. Campbell, F. H. Bible, W. D. Riddell and J. O. Hendrick.

McEwen, Tenn.—Hotel.—E. Cowen, owner of McEwen Hotel, will replace present hotel with concrete building, probably three stories high.

Memphis, Tenn.—Business Building.—Scott & Holmes have permit to erect two-story brick building, with basement, for Memphis Bread Co. costing \$5000.

Memphis, Tenn.—School Building.—Board of Education, A. B. Hill, secretary, will award contract September 16 for erection of 12-room brick school building according to plans and specifications on file in office of Alsop & Woods, architects, Randolph Building, Memphis; usual rights reserved.

Memphis, Mo.—Courthouse.—Falla City Construction Co., Louisville, Ky., has contract to erect stone courthouse for Scotland county costing \$50,000 after plans by W. Chamberlin & Co., Birmingham, Ala.

Memphis, Tenn.—Apartment-house.—Housekeepers' Club, Mrs. H. C. Myers, president, has had plans prepared for erection of eight-story apartment-house costing \$250,000, to be conducted on co-operative plan.

Meridian, Miss.—College.—College of Physicians and Surgeons will have plans prepared by F. G. Shaw for erection of college buildings to cost between \$50,000 and \$75,000.

Mobile, Ala.—Roundhouse.—Mobile, Jackson & Kansas City Railroad Co. will build roundhouse of brick, eight stalls, 66 feet deep, replacing structure recently reported burned at Frascati. H. S. Jones is engineer in charge.

Mobile, Ala.—Apartment-house.—James A. Lewis has awarded contract to the Jett Bros. Constructing Co. for erection of proposed apartment-house; 10 stories; steel and mill construction, with ornamental brick, stone and terra-cotta; cost \$200,000. (Referred to in July.)

Montgomery, Ala.—Church.—Highland Avenue Baptist Church is having plans prepared by R. S. Whaley, South Decatur street, for church building mentioned in August; frame and brick veneer; hot-air heating; electric lighting; no contract to be let. Pastor is supervising foreman; cost \$10,000 to \$15,000.*

Monticello, Ark.—Church.—Wilson & Hendrix, Pine Bluff, Ark., have contract at \$75,000 to erect edifice for the Associate Reformed Presbyterian Church.

Muskogee, I. T.—School Building.—City will vote September 10 on issuance of \$100,000 of bonds for erection of high-school building. Address The Mayor.

New Iberia, La.—Building.—Woodmen of the World will erect \$50,000 fraternal building. It is proposed to incorporate company with \$50,000 capital stock, of which C. E. Reynolds will be president; H. V. Bailey, vice-president; W. J. Bernard, treasurer, and F. G. Blumenthal, secretary.

Newport News, Va.—Hotel.—Peninsula Hotel Corporation incorporated with \$10,000 capital stock; A. G. Tulker, president; John T. Gregory, secretary-treasurer.

North Birmingham, Ala.—Business Building.—J. E. Freed, 1021 Highland avenue, has had plans prepared by W. C. Weston, First National Bank Building, Birmingham, for erection of business building; two stories; 40x65 feet; brick and stone.

Oakley, Md.—Residence.—D. H. Rice is having plans prepared by Owens & Sisoo, Continental Trust Building, Baltimore, Md., for erection of residence to replace structure reported burned in July; new building probably of stone to first story, with shingles above; electric lights, steam heat, etc.

Oklahoma City, O. T.—Office Building.—Thomas P. Campbell and C. P. Leonard are considering plans for erection of six-story stone office building.

Poteau, I. T.—Bank Building.—LeFlore Bank & Trust Co., C. Dixon Hill, president,

will erect bank building at a cost of about \$10,000.

Pine Bluff, Ark.—Church.—Lane & Mitchell have contract to erect brick edifice for Carr Memorial Church costing \$7000. Rev. R. A. McClintock, pastor.

Raleigh, N. C.—Capitol Building.—Frank P. Milburn & Co., Home Life Building, Washington, D. C., have prepared plans for proposed remodeling of the North Carolina Statehouse at a cost of \$450,000.

Raleigh, N. C.—Hospital.—State Hospital Commission, Charles A. Webb, chairman, Asheville, N. C., will erect additional building at the State Hospital for male patients; capacity 100. W. A. Erwin, Durham, N. C., Dr. J. W. McNeill, Cumberland, N. C., and J. H. Weddington, Charlotte, N. C., committee in charge. Commission was reported in July to erect storage building at a cost of \$4200 and carpenter shop, with equipment, to cost \$3800, according to plans by Barrett & Thomson.

Raleigh, Tenn.—School Building.—Board of Education has adopted plans by Alsop & Woods, Randolph Building, Memphis, Tenn., for erection of school building costing between \$40,000 and \$50,000. Bids will be opened September 16.

Rector, Ark.—School Building.—City has authorized an issuance of \$15,000 of bonds for erection of school building. Address The Mayor.

Reidsville, N. C.—Hotel.—Reidsville Hotel Co., reported incorporated in July with \$100,000 capital stock, is having plans prepared for erection of proposed hotel. E. F. Hall, president; H. A. Hayes, vice-president, and John D. Huffines, secretary.

Richmond, Va.—Church.—Northside Baptist Church, Rev. C. B. Arendall, pastor, will erect edifice of either brick, brownstone or concrete.

Savannah, Ga.—Hospital.—St. Joseph's Hospital has had plans prepared for erection of building to replace present structure; main building will be three stories high.

Savannah, Ga.—Hotel.—Charles H. Levan, lessee of Marshall House, will remodel structure, expending a total of about \$25,000 in repairs and furniture; new structure will contain about 100 rooms.

Seguin, Texas.—Mercantile Buildings.—J. Kellner has contract to erect four mercantile buildings for H. Troell costing \$10,000. (Referred to in July.)

Sidell, La.—School Building.—Board of trustees of Sidell Public School will open bids September 2 for erection of school building; certified check, \$500; usual rights reserved. Plans and specifications can be obtained from Drago & Smith, architects, Cosmopolitan Bank Building, New Orleans, La., or W. A. Martin, president of board.

Smithfield (not a postoffice), Ala.—Residence.—F. M. Tuttle, Birmingham, Ala., has had plans prepared by J. W. McClain, Birmingham, Ala., for erection of residence at Smithfield; two stories; frame; concrete foundation; gas and electricity; cost \$5000.

St. Joseph, Mo.—Hotel.—Isele Bros. of Memphis, Tenn., have awarded contract to Selden-Breck Construction Co., 403 Fullerton Building, St. Louis, Mo., for erection of hotel at St. Joseph, Mo., as reported lately. Building to be nine stories high; steel frame; fireproof; steam heating; electric and gas lighting fixtures; two passenger and one freight elevators; ornamental iron, etc.; cost, \$420,000.

St. Louis, Mo.—Residences.—Renton Construction Co. is having plans prepared by E. Ross Chamblin, Holland Building, for erection of 20 residences; two stories; 25x30 feet; cost \$50,000.

St. Louis, Mo.—Garage.—Wm. F. Little, Chemical Building, will erect garage; two stories; 125x150 feet; gas and electricity; cost \$25,000; plans prepared by J. C. Rankin, architect.

St. Louis, Mo.—Business Building.—Louis Friedman will erect mercantile building; eight stories; 27x175 feet; stone, terra-cotta, reinforced concrete and steel; cost \$100,000; E. C. Janssen, architect.

St. Louis, Mo.—Hall.—Tower Grove Turner Association, E. A. Braun, secretary, is having plans prepared by William Gruen for erection of hall; four stories; 137x150 feet; cost \$100,000.

St. Louis, Mo.—Church.—St. Anthony's Church, Rev. T. Magnien, pastor, will erect edifice 151x225 feet; stone, terra-cotta, etc.; cost \$250,000. Plans are being prepared by Brotha Adrian.

St. Louis, Mo.—Dwelling.—O. R. S. Traber, Fullerton Building, is preparing plans for erection of dwelling to cost \$25,000.

St. Louis, Mo.—Church.—Bethel Evangelical Congregation, Rev. T. L. Mueller, pastor, is having plans prepared by Charles F. May,

Laclede Building, for erection of edifice 78x51 feet; cost \$40,000.

St. Louis, Mo.—Residence.—Aaron Fuller will erect two-and-one-half-story brick-and-stone residence according to plans by Barnett, Haynes & Barnett.

Tampa, Fla.—Warehouse and Stables.—Boiling & Patterson, Jacksonville, Fla., have contract to erect storage warehouse and stables for the Southern Express Co. in Tampa. Structure will be 150x80 feet and cost about \$15,000.

Timmonsville, S. C.—Church.—Z. T. Kershaw, chairman, will build by day labor the edifice lately reported; 50x70 feet in size; brick construction; tin shingle roof; warm-air heat; cement plaster; electric-lighting fixtures; cost, \$9000 to \$9000; architect, J. H. Sams of Columbia, S. C.

Towson, Md.—Parsonage.—Catholic Church of the Immaculate, Rev. Philip H. Sheridan, pastor, has awarded contract to James H. Brown, Denton, Md., for erection of rectory; two and a half stories with basement; exterior of stucco; hot-water heat; electric lighting; 15 rooms; speaking tubes connecting all rooms; cost about \$10,000. Plans have been prepared by Thomas C. Kennedy, Law Building, Baltimore, Md. (Referred to in May.)

Tribbey, O. T.—Warehouse.—Tribbey Farmers' Union Warehouse Co. incorporated by R. M. Fowler, John H. Gilbert, S. C. Clark and others.

Vidalia, Ga.—Hotel.—Mrs. Rimes will erect brick hotel to cost \$12,000.

Vidalia, Ga.—Residence.—W. T. Jenkins will erect residence at a cost of \$8000.

Washington, D. C.—Dwellings.—M. J. Keane, 217 Colorado Building, will erect 20 two-story brick dwellings at 2214-52 Ontario road; John J. Miller & Co., architects; cost about \$40,000.

Washington, D. C.—Hospital Buildings.—R. C. Hollyday, chief of Bureau of Yards and Docks, Navy Department, Washington, D. C., will receive sealed proposals until September 14 for erecting three brick buildings at the naval hospital reservation, Washington; plans and specification on application.

Washington, D. C.—Garage.—Thomas & Tolman Automobile Co. incorporated with \$25,000 capital stock by John L. Thomas, 1122 Greens court N. W.; Guy H. Tolman, The Ontario, and Bertha F. Tolman. Company will build garage at 1828 L street N. W., where its offices will be.

Washington, Ga.—Store and Office Building.—B. S. and P. H. Irvin have had plans prepared for erection of store and office building; two stories; 42x60 feet; brick; iron and plate-glass front; cost \$5000.

Washington, D. C.—School.—Henry L. West, Jay J. Morrow, Commissioners District of Columbia, room 43 District Building, will receive sealed proposals until September 14 for erecting addition to Petworth school building, Brightwood avenue and Philadelphia street N. W. Plans and specifications can be obtained by depositing \$10; usual rights reserved.

Washington, D. C.—Apartment-house.—S. W. Woodward of Woodward & Lothrop, 11th and F streets N. W., has awarded contract to S. H. Edmonston, 611 G street N. W., for the construction of addition to apartment, house at 918 18th street N. W.; six stories; 22.5x88.6 feet; brick with limestone trimmings; steel frame; fireproof construction; slag roof; electric wiring and fixtures; sanitary plumbing; steam-heating system; cost \$42,000; B. F. Meyer, architect, Bond Building.

Washington, D. C.—Store Buildings.—Wm. J. Heller has commissioned Hunter & Bell, architects, 1010 F street N. W., to prepare plans for rebuilding four store buildings at 1809-1815 14th street N. W.

Washington, D. C.—Dwelling.—A. R. Townsend, 518 10th street N. W., has awarded contract to J. J. Kelley, 515 10th street N. W., for construction of three-story brick dwelling with electric wiring and fixtures and hot-water heating system at 2617 Garfield street to cost \$6000; Hunter & Bell, architects, 1010 F street N. W.

Washington, D. C.—Dwelling.—Zepp Bros., builders, 1305 F street N. W., will erect three-story brick building with hot-water heating system at 757 Park road to cost \$7000; N. R. Grimm, architect, 627 F street N. W.

Washington, D. C.—Public Building.—Plans and specifications have been completed by Paul B. Cret, University of Pennsylvania, and Albert Kelsey, 1524 Chestnut street, associate architects, Philadelphia, Pa., for the administration building to be erected by the Bureau of American Republics, and estimates on construction will be

taken at once; John Barrett, Washington, D. C., is director of the Bureau.

Washington, D. C.—School Building.—District Commissioners will receive bids until September 14 for the construction of an addition to Petworth School Building. Plans and specifications can be obtained from room No. 43, District Building.

Waynesboro, Miss.—Office Building.—Fagan & Co. will erect office building. Contract has been awarded.

Webster Groves, Mo.—Residence.—F. Parker, Liggett Building, St. Louis, Mo., will erect two-story residence; 30x32 feet; cost, \$6000; plans by L. Ewald, Security Building, St. Louis, Mo.

Wheeling, W. Va.—Residence.—A. R. Bennett will erect residence; D. T. Burton, contractor.

Wheeling, W. Va.—Warehouse.—Wheeling Warehouse & Storage Co., D. Carter List, Jr., manager, has awarded contract to P. Farrell & Co., Cincinnati, Ohio, for erection of storage warehouse; four stories; 271x72 feet; mill construction; front of brick with stone trimmings; ground floor of concrete, with capacity of 300 pounds to square foot; second floor, 250 pounds; third, 200 pounds, and fourth, 150 pounds; gas engines; electric lighting; elevators; cost, \$75,000; architect, M. A. Long, Baltimore, Md.

Williamstown, W. Va.—Church.—W. A. Decker, architect, St. Clair Building, Marietta, Ohio, will receive bids until September 14 for erection of edifice for First Baptist Church, Williamstown, according to plans and specifications on file in office of architect. Certified check or surety-company bond for 10 per cent. of bid must accompany each proposal; usual rights reserved.

Wilmar, Ark.—Warehouse.—Drew County Farmers' Union Warehouse Co. incorporated with \$15,000 capital stock by L. A. Bird, O. P. Bird, A. M. Nickols, N. B. Kirsh and others.

RAILROAD CONSTRUCTION

Abilene, Texas.—Messrs. Sayles and Bradshaw of Abilene, contractors for the Abilene Street Railway, have, it is reported, planned to build a railroad from Abilene via Rising Star to Hamilton, Texas, and thence to Temple, Texas. The Temple Commercial Club is interested, and A. F. Bentley, P. L. Downs and T. J. Darling have been appointed as committee.

Asheville, N. C.—Reported that J. B. Lot-spelch of Weaverville has conveyed to Philip E. Heintz of Boston all rights in the franchise and right of way of the Asheville & Weaverville Railway & Power Co. W. H. Hastings, also of Boston, has bought 2500 acres of forest land from James A. Cole and will, it is said, develop it in connection with the railway.

Belington, W. Va.—Reported that the proposed Belington & Northern Railroad will be built via Elkins to a connection with the Chesapeake & Ohio Railway. J. M. Schoon-maker, vice-president of the Pittsburg & Lake Erie Railroad at Pittsburg, Pa., is said to be interested.

Carthage, N. C.—The Randolph & Cumberland Railway, it is reported, will let contract within three months for its proposed extension of 20 miles along Deep river. Ira A. McCormack is president at Carthage, and W. C. Cram, Jr., is chief engineer at Harrison, N. C.

Charleston, W. Va.—The Kanawha & Michigan Railway is reported to have filed a mortgage for \$2,500,000 to secure bonds of that amount to cover improvements made and projected. C. Buxton is chief engineer at Toledo, Ohio.

Charlottesville, Va.—Walter Washabaugh, chief engineer of the Virginia Air Line, is reported as saying that five miles of grading have been completed on the line which is to be built from Lindsay to Upper Breno, Va., 30 miles, and track laying is to begin about November 1. J. N. H. Cornell & Co. of Gordonsville, Va., are doing the work. T. O. Troy of Charlottesville is president.

Chestertown, Md.—Reported that contracts will soon be let for the line of the Kent Traction Co. from Chestertown to Tolchester, 11 miles. Survey completed and right of way obtained. Line will also reach Fair-lee, Georgetown, Sandy Bottom, Rock Hall, Melitota and Lankford. A. A. Lamkin is secretary at 611 Equitable Building, Baltimore, Md.

Dallas, Ga.—The Paulding County Electric Co. is reported to have begun construction of its new plant three miles from town, and there is talk of building an electric railway from the Seaboard Air Line's station to Dallas, about one mile.

Excelsior Springs, Mo.—The St. Joseph Excelsior Springs & Lexington Railway Co. has been incorporated to build an electric railway from Excelsior Springs to Hibbard, six miles. Connection will be made through to Lexington and Kansas City. Those interested are Dr. G. P. Lingerfelter of Denver, David C. Finley of Kansas City, S. S. McIntire and Allen M. Bates of Excelsior Springs, William J. Bates of Hibbard, Charles Dyer of Denver, Col., and C. D. Wade of Excelsior Springs and others.

Fairmont, W. Va.—The Fairmont & Southern Railroad Co. has been chartered to build a line from Belington, via Grafton and Fairmont, W. Va., to Pittsburg, Pa. The incorporators are John T. Williams of Baltimore, Md.; Benjamin F. Overholt of Scottsdale, Pa.; Ralph Overholt of Pittsburg, Pa.; Charles F. Teter and Samuel A. Moore of Philippi, W. Va.; Charles E. Conaway and Waltman H. Conaway of Fairmont, W. Va.

Fort Lawn, S. C.—It is announced that the Catawba Valley Railroad from Fort Lawn to Spence, S. C., 23 miles, has been completed and is ready for business.

Fort Worth, Texas.—J. A. Flack of Toledo, Ohio, is reported to be investigating in and around Fort Worth with reference to building an interurban electric railway.

Gotebo, O. T.—Survey is reported finished between Gotebo and Frederick for the proposed Gotebo & Southwestern Railway. Survey will now be made toward Clinton, and officers are reported as saying that the company will be ready to begin construction within 60 days.

Guthrie, O. T.—Mr. O. C. St. Clair, vice-president of the proposed Minneapolis, Kansas City & Gulf Electric Railway, writes from Minneapolis, Minn., to the Manufacturers' Record that the company has just closed a contract for preliminary survey from that city to Des Moines, Iowa. It is expected within 30 days to perfect arrangements for survey in Texas. C. B. Holes is president and E. P. Bradshaw secretary and treasurer. The line projected is from Minneapolis via Kansas City, Guthrie, Waco and other points to Galveston, Texas.

Houston, Texas.—The Gulf, Colorado & Santa Fe Railway, it is reported, proposes to build a cut-off line from Stowell to Houston, Texas, via Wallisville. C. F. W. Felt is chief engineer at Galveston, Texas.

Jackson, Ky.—The Kentucky Union Land & Timber Co., it is reported, will soon begin construction of a lumber railroad 15 miles long from Jackson into Perry and Knott counties. Survey is under way.

Kirbyville, Texas.—The Orange & North-western Railroad, it is reported, will build a branch from Call to Kirbyville, Texas. B. B. Gordon is chief engineer at Orange, Texas.

Lexington, Ky.—On the Frankfort and Versailles line of the Lexington & Interurban Railways Co. eight miles of track are now laid, and it is expected to complete the road in October.

Lyndhurst, Va.—The Manufacturers' Record is informed that Pressy & Weller of Washington, D. C., have completed surveys for the Lyndhurst & Sherando Railroad and the construction contract has been let. Work may begin within 30 days. Line will run from Lyndhurst, on the Norfolk & Western Railway, to the property of the National Manganese Corporation.

McEwen, Tenn.—The management of Ruskin Cave College is reported as saying that an electric railway is to be built from there to McEwen, Northern capital being interested.

Mexico, Mo.—Reported that the Chicago, Burlington & Quincy Railroad will build its own line from Mexico, Mo., to a connection with the tracks of the Kansas City, St. Joseph & Council Bluffs Railway. T. E. Calvert is chief engineer at Chicago.

Montreal, Ark.—The Arkansas, Oklahoma & Texas Railroad has been chartered with \$150,000 capital to build a line seven miles long from Montreal to a connection with the Choctaw division of the Rock Island system. The directors are F. Bache, James F. Reed, C. E. Speer, W. J. Echols, T. W. M. Boone, I. A. Ball, R. Gulley, Jr., and C. H. Finley of Fort Smith, and H. Denman and J. B. Hilling of Midland.

Muskogee, I. T.—President R. B. Moseley of the Great Southwestern Railway Co. is reported as saying that it will build a railroad from St. Louis, Mo., to El Paso, Texas, 1400 miles, via Springfield, Mo., Sallisaw and McAlester, I. T., and Vernon, Texas. Survey under way from Sallisaw to Vernon, 200 miles. Construction expected to begin next spring. A. L. Gibbs of Wagoner, I. T., is chief engineer. Headquarters at Oklahoma City, O. T.

Oakland, Md.—The Youghiogheny Light &

Power Co. of Garrett county, Maryland, lately incorporated, will, it is reported, build several electric railways. The Ohio-pyle Company of Ohio, Pa., may be able to give information.

Ola, Ark.—The Fort Smith Lumber Co. is reported to be building a railroad. From Ola westward to Plainview, seven miles, the line is in operation, but 14 miles have been graded and 25 miles additional have been surveyed. Preliminary surveys made to Hot Springs. W. W. Gardner & Co. are the contractors.

Pine Bluff, Ark.—The Thomas A. Bell Construction Co. of St. Louis, Mo., is reported to have assembled a large force at Pine Bluff to begin survey for the Pine Bluff North & South Railroad. Thos. A. Bell is in charge.

Pine Bluff, Ark.—President J. J. Flske of the Little Rock & Pine Bluff Traction Co., 501 Main street, Little Rock, Ark., informs the Manufacturers' Record that the company will now receive bids for construction and material for its proposed line of electric railway between Little Rock and Pine Bluff, 50 miles.

Port Arthur, Texas.—An officer of the Gulf, Colorado & Santa Fe Railway Co. writes the Manufacturers' Record that there is no truth in the report that the company has bought a terminal site in Port Arthur or that it will build a line from Beaumont.

Red Bird, Ky.—The Parkersburg Tie & Lumber Co. is reported to have built a five-mile railroad from Red Bird into timber land. W. G. Stout of Parkersburg, W. Va., is general superintendent.

Roscoe, Texas.—Tracklaying is reported in active progress on the Roscoe, Sulder & Pacific Railway.

Sedgwick, Ark.—The Cache Valley Railway, from Sedgwick to Light, is reported sold to a syndicate headed by J. D. Goldman of St. Louis, and he has been elected president of the company. H. A. Culver of Walnut Ridge, Ark., continues as second vice-president. It is said that an extension will be built to Paragould and another extension to Walnut Ridge or Newport, Ark. G. W. L. Brown of Walnut Ridge, it is reported, is secretary and general manager.

Slocumb, Ala.—President A. D. Kelley writes the Manufacturers' Record that the Alabama, Florida & Gulf Railroad Co. is to build from Chipley, Fla., via Noma, Fla., and Slocumb and Enterprise, Ala., to Troy, Ala., but not to Crowley. The other officers are: D. H. Morris, vice-president; C. E. Segrest, treasurer, and W. W. Beall, secretary. Mr. Kelley is secretary and treasurer of the Morris Lumber Co. of Slocumb.

St. Louis, Mo.—The stockholders of the Frisco system have approved the new bond issue for \$115,000,000 and have also authorized the increase of capital stock from \$100,000,000 to \$200,000,000. Over \$47,000,000 of bonds will be reserved for extensions, betterments, improvements and acquisitions, of which \$10,000,000 will be issued this year. J. F. Hinckley is chief engineer at St. Louis.

Sulphur, I. T.—Survey for the Sulphur, Paris & Southern Railroad is reported under way. E. E. Colby is chief engineer and D. J. Boon is locating engineer. The line will reach coal fields.

Sumter, S. C.—A meeting has been held regarding a proposed railway from Sumter to Bethune, on the Seaboard Air Line, and J. M. Reid and J. P. Kilgore have been appointed to go over the route before survey is ordered.

STREET RAILWAYS

Bluefield, W. Va.—Reported that E. T. Oliver and E. L. Bailey will apply for a street-railway franchise.

Danville, Ky.—Mr. T. M. Jenkins, vice-president, secretary and general manager of the Danville Light, Power & Traction Co., writes the Manufacturers' Record that the company will build one mile of line, its own forces doing the work, and it is expected to be in operation next year.

Ensley, Ala.—Construction is reported begun on the Ensley Street Railway, President J. J. Walker driving the first spike.

Eureka Springs, Ark.—Byron M. Hopkins of Hopkins & Luther, bankers, Chicago, has, it is reported, taken an option on the Citizens' Electric Co., including street railway, lighting and ice plants, and it is expected that the deal will be closed within a few days. W. M. Duncan is president of the electric company. Improvements may be made.

Hattiesburg, Miss.—The consolidation of the street railway, the gas company and the light and power company under the name of the Hattiesburg Traction Co. has been made, with the proposed capital increase to \$500,000. The company is building an electric railway,

which is to be continued to Mammoth Springs. The officers are A. F. Thomasson, president; H. S. Stevens, first vice-president; H. A. Camp, second vice-president; N. B. Blount, secretary-treasurer, and C. Z. Stevens, general manager.

MACHINERY, PROPOSALS AND SUPPLIES WANTED

Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The Manufacturers' Record has received during the week the following particulars as to machinery that is wanted.

Air Compressor.—F. R. Van Antwerp, Mt. Washington, Md., wants air compressor of 500 cubic feet capacity per minute at 80 pounds; also vertical air receiver of 80 cubic feet capacity.

Belting.—Blue Ridge Bending Co., Lenoir, N. C., wants leather and canvas belting.

Boiler.—Blue Ridge Bending Co., Lenoir, N. C., wants prices on new or second-hand 50 or 60-horse-power boiler.

Boiler.—Blue Ridge Distilling Co., Buffalo Ridge, Va., wants prices on 50-horse-power boiler.

Boiler.—L. F. Hobbs, Law Building, Norfolk, Va., in market for boiler; second-hand; first-class order. (See "Hoisting Equipment.")

Boiler.—Central Transfer Co., 415 North Front street, Baltimore, Md., wants return tubular boiler, 5½x16 feet.

Boiler.—L. F. Hobbs, Law Building, Norfolk, Va., wants boiler for hoisting equipment. (See "Hoisting Engine.")

Boilers.—National Cob Pipe Works, Union, Mo., wants prices on boilers. Address Chas. P. Reinhard, manager.

Box Shooks.—Woodstock Hardware & Spool Manufacturing Co., Charleston, S. C., in market for large quantities of box shooks.

Bridge (Steel) Materials.—Little Rock & Pine Bluff Traction Co., J. J. Flske, president, 501 Main street, Little Rock, Ark., wants prices on steel bridging materials.

Bridge Construction.—Bids will be opened September 11 for construction of steel bridge over San Jacinto river at Humble; plans and specifications on file in office of County Engineer, 307½ Main street, Houston, Texas; usual rights reserved. Certified check for 10 per cent. of bid must accompany same, payable to A. E. Amerman, County Judge. Bids must be endorsed on cover "Bid for Construction of Steel Bridge across San Jacinto River" and addressed to John B. Ashe, County Auditor, Houston, Texas.

Bridge Construction.—Sealed proposals in triplicate will be opened September 9 at general depot of Quartermaster's Department, Washington, D. C., for constructing reinforced concrete bridge on Military road to Fort Myer, Va. Plans and specifications on application to above office; usual rights reserved; Major M. Gray Zalinski, Quartermaster, United States Army, in charge of depot, Washington, D. C.

Bridge Construction.—Bids will be received at office of Ennis M. Douglass, City Register, Memphis, Tenn., until September 5 for constructing reinforced concrete deck for Madison avenue bridge over Bayou Gayoso. Plans and specifications may be seen at office of City Engineer; certified check, \$50; usual rights reserved; J. T. Walsh, Acting Mayor.

Bridge Construction.—City Secretary, Sherman, Texas, will open bids September 16 for construction of steel bridge in Sherman; 16-foot roadway; total length 75 feet, which is to consist of a single span "pony truss," and remaining 25 feet of a two-bent approach, also constructed of steel; live load capacity, not less than 1600 pounds per linear foot and factor of safety not less than four. Usual rights reserved. C. E. Craycroft, Mayor.

Building Materials.—Selden-Breck Construction Co., 403 Fullerton Building, St. Louis, Mo., wants prices on marble, tiling, ornamental iron, etc., for \$420,000 hotel.

Building Supplies.—See "Iron and Steel."

Car and Truck Wheels.—See "Railway Equipment."

Cement.—Weber-Duller Construction Co., Houston, Texas, wants prices on 500 barrels of Portland cement.

Cement-pipe Machinery.—Garland B. Miller, Falfurrias, Texas, wants to correspond with manufacturers of continuous cement-pipe machinery.

Chair Machinery.—Thomasville Chair Co., Thomasville, N. C., wants chair-back bender.

Cob-pipe Machinery.—National Cob Pipe Works, Union, Mo., wants cob machinery for manufacturing corn-cob tobacco pipes. Address Chas. P. Reinhard, manager.

Concrete-block Machinery.—American Novelty Co., Norfolk, Va., in market for cement-block machinery.

Corrugated Iron.—J. C. Madden & Sons Co., Sapulpa, I. T., wants corrugated iron for main factory building of glass plant.

Crane.—Georgia Car Co., Atlanta, Ga., wants 10-ton locomotive crane; first-class second-hand machine acceptable.

Dam Contractors.—Chickasaw Water Power Co., Lawrence Martin, treasurer, Chickasaw, I. T., wants to correspond relative to construction of dam under bond guaranteeing the work.

Distilling Machinery.—Theo. Wise, 112 Dearborn street, Chicago, Ill., wants addresses of manufacturers of turpentine-distillery machinery; also wants data regarding turpentine processes.

Dredge.—Sealed proposals will be received at United States Engineer Office, 815 Witherspoon Building, Philadelphia, Pa., until September 30 for constructing steel-hull 16-inch pump dredge for Savannah river. Information on application; J. C. Sanford, Major, engineers.

Dumbwaiters.—See "Elevators."

Electrical Equipment.—John M. Greene, Drexel Building, Philadelphia, Pa., in the market for 250-kilowatt unit, alternating, two-phase, 60 cycles, 2200 volts, with engine direct or belt driven; must be in first-class condition.

Electrical Equipment.—Little Rock & Pine Bluff Traction Co., J. J. Flske, president, 501 Main street, Little Rock, Ark., wants prices on equipment for electric power-house for 50-mile railway.

Electrical Equipment.—National Cob Pipe Works, Union, Mo., wants prices on electrical equipment. Address Chas. P. Reinhard, manager.

Electrical Fixtures.—Board of Awards, care of J. Sewell Thomas, City Register, City Hall, Baltimore, Md., will receive separate sealed proposals until September 11 for the special illumination of certain public buildings and streets and for the permanent lighting of the City Hall dome; specifications at office of Superintendent of Lamps and Lighting, City Hall; certified check required and usual rights reserved.

Electrical Machinery.—F. R. Van Antwerp, Mt. Washington, Md., wants electric generator of 15 kilowatts; also electric pump of eight gallons capacity per minute for 300 feet.

Electrical Machinery.—C. T. Schmitt & Co., 9 Clinton street, Newark, N. J., want catalogues of alternating and direct current generators.

Electrical Machinery.—Chickasaw Water Power Co., Lawrence Martin, treasurer, Chickasaw, I. T., wants to correspond with manufacturers of electrical machinery—generators, transformers, meters, wire, etc.—for water-power electrical plant.

Electric and Gas Fixtures.—County Court of Randolph County, Elkins, W. Va., will open bids September 23 for electric and gas fixtures for courthouse now being erected for Randolph county and for wood furniture for courtrooms and offices. Specifications on file with Lee Crouch, Clerk of Court.

Electric-light Plants.—Burns & McDonnell, 821 Scarritt Building, Kansas City, Mo., want catalogues of electric-light-plant machinery and supplies for reference in engineering offices.

Electric Motors.—Teasdale Fruit & Nut Products Co., Rogers, Ark., wants prices on 10, 15, 20-horse-power motors, two-phase, 220 or 110 volts, 60 cycles, alternating current.

Electric-power Circuit.—Bids will be received at Bureau of Supplies and Accounts, Navy Department, Washington, D. C., until September 10 to construct an electric transmission power circuit and furnish electric power at the wireless telegraph station, St. Augustine, Fla. Applicants for proposals should refer to Schedule 248. Blank proposals will be furnished on application to the bureau; E. B. Rogers, Paymaster-General, U. S. N.

Elevator.—A. N. Shearman, Athens, Tenn., wants water-power elevator.

Elevators.—Edward R. Mosher, 135 Broadway, New York, wants addresses of manufacturers of dumbwaiters.

Elevators.—Selden-Breck Construction Co., 403 Fullerton Building, St. Louis, Mo., wants prices on elevators; two passenger and one freight.

Embossing Machinery.—Fr. Gronarz, Landaustrasse 3, Cassel, Germany, wants to correspond with makers of embossing (inlaying) presses for curved surfaces.

Engine.—Sumter Lumber Co., Sumter, S. C., in market for 150 or a 200-horse-power Corliss engine.

Engine.—Eley Britton, Winborne, Va., in market for five-horse-power marine engine with boat fittings.

Engine.—Blue Ridge Bending Co., Lenoir, N. C., wants prices on new or second-hand 30 or 40-horse-power engine.

Engine.—John M. Greene, Drexel Building, Philadelphia, Pa., in market for engine, direct or belt driven, with electrical equipment. (See "Electrical Equipment.")

Engine.—Blue Ridge Distilling Co., Blue Ridge, Va., wants 20-horse-power engine.

Engine.—H. E. Graper, Lexington, Tenn., in market for gasoline or oil engine.

Engine.—See "Hoisting Engine."

Engines.—See "Gas Engines and Producers."

Engines.—National Cob Pipe Works, Union, Mo., wants prices on engines. Address Chas. P. Reinhard, manager.

Filling Contract.—Washington, D. C.—Sealed proposals will be received by Henry L. West, Jay J. Morrow, Commissioners District of Columbia, 43 District Building, until September 14 for filling approaches to Anacostia bridge, amounting to about 90,000 cubic yards. Specifications and information on application; usual rights reserved.

Fencing.—See "Wire Fencing."

Floor Tiles.—Edw. R. Mosher, 135 Broadway, New York, wants addresses of manufacturers of floor tiles.

Foundry Equipment.—H. E. Graper, Lexington, Tenn., in market for foundry equipment. (See "Machine Tools.")

Gas Engine and Producer.—C. L. Heath, 213 14th street N. W., Washington, D. C., wants information and estimates on gas engine and gas producer for ice plant; engine to be designed for driving electric generator when not driving ice plant. (See "Ice Plant.")

Gas Engines and Producers.—C. T. Schmitt & Co., 9 Clinton street, Newark, N. J., want catalogues of gas engines and producers for electric-light and traction plant.

Gas Fixtures.—Sealed proposals in triplicate will be received at office of Capt. B. B. Hyer, Constructing Quartermaster, Fort Myer, Virginia, until September 12 for furnishing and installing acetylene gas fixtures in Isolation Hospital. Bidders who are not manufacturers must state from whom fixtures are to be obtained. Certified check for 10 per cent. of amount required; usual rights reserved. Envelopes should be endorsed "Proposals for Installing Gas Fixtures in Isolation Hospital" and addressed to Capt. B. B. Hyer.

Gasoline Engine.—See "Engine."

Handle Machinery.—Southern Hardwood Manufacturing Co., Box 122, Savannah, Ga., wants prices on machinery for making tool handles, spokes, mallets, bats, etc.

Heating Plant.—Department of the Interior, G. W. Woodruff, acting Secretary, Washington, D. C., will receive sealed proposals, in duplicate, until September 17 for installing heating apparatus in medical building of Howard University, southwest corner 5th and W streets N. W. Specifications can be seen and information obtained from Herbert S. Scurlock, 531 Florida avenue N. W., or William C. McNeill at the building.

Heating Plant.—Selden-Breck Construction Co., 403 Fullerton Building, St. Louis, Mo., wants estimates on steam-heating plant for \$420,000 hotel.

Holst.—The American Metallic Packing Co., Lexington, Ky., wants gasoline engine to haul a loaded train car of 10,000 pounds up a 40-foot elevation 400 feet long; new or second-hand; furnish full details.

Hoisting Engine.—L. F. Hobbs, Law Building, Norfolk, Va., in market for hoisting engine 8x12 or larger, D. C. D., complete with boiler and brakes on skids. State location and lowest cash price.

Hoisting Equipment.—L. F. Hobbs, Law Building, Norfolk, Va., is in market for a Lidgetwood hoister, 8½x10, D. C. D., with boiler; second-hand, first-class order.

Holisting Equipment.—F. R. Van Antwerp, Mt. Washington, Md., wants double-cylinder single-drum hoist with capacity of 8000 pounds.

Ice and Cold-storage Machinery.—Argenta Ice & Cold Storage Co., Argenta, Ark., wants prices on machinery for cold-storage plant and 50 to 75-ton ice plant.

Ice and Cold-storage Plant.—Office of Constructing Quartermaster, Mobile, Ala., August 15. Sealed proposals will be received until September 25 for construction at Fort Morgan of 150,000-gallon tank and trestle and for pumping plant, ice machine and cold storage. Address Capt. Louis F. Garrard, Jr., Box 66, Mobile, Ala.

Ice Boxes.—Edward R. Mosher, 135 Broadway, New York, wants addresses of manufacturers of ice boxes.

Ice Plant.—C. L. Heath, 213 14th street N. W., Washington, D. C., wants information and estimates on ice plant of 10 to 15 tons capacity daily; to use electric or gas engine drive.

Iron and Steel.—Ridgview Cotton Mills, H. F. Smith, manager, Newton, N. C., wants steel four-way column cap for 10x14 timber and stirrups on hangers for 10x14 timbers, and strap and dog irons to hold beams together.

Ladders.—A. N. Shearman, Athens, Tenn., wants ladders.

Lath Mill Machinery.—Garbutt & Donovan Manufacturing Co., Lyons, Ga., in market for lath mill machinery.

Levee Construction.—Sealed proposals for constructing Burton to Londerbough levee, about 25,000 cubic yards, in Lake Borgne Levee District, will be received until September 20; information on application; J. F. McIndoe, Captain Engineers.

Lighting Equipment.—Ion Simons, City Electrician, Charleston, S. C., will open bids November 15 for lighting streets and public buildings of Charleston for a term of one, two or four years with electricity, gas or some other equivalent illuminating power, or partly by one and partly by another. Estimate requirements are 500 arc lights of inclosed type, to be supplied with an alternating current of not less than 6.6 amperes under a pressure of not less than 70 volts and electric energy of each lamp, 475 watts, with illuminating capacity of 1200 (normal) candle-power. Gas to have five-foot burners, gas to be delivered at pressure of not less than 13 inches and of standard commercial quality. Detail specifications furnished on application to City Electrician. Lights to be ready for operation by June 30, 1908; certified check, \$350; bond, \$25,000; usual rights reserved; R. M. Masters, chairman Committee on Lighting.

Lighting Fixtures.—Selden-Breck Construction Co., 403 Fullerton Building, St. Louis, Mo., wants estimates on gas and electric-lighting fixtures for \$420,000 hotel.

Lighting Plant.—See Machinery Wanted item under "Water-works."

Lock and Dam Construction.—Bids will be received at United States Engineer's Office, Mobile, Ala., until October 5 for building locks and dams Nos. 2 and 3 and locktender's house, Tombigbee river, Alabama. Information on application; H. Jervey, Major, Engineers.

Lumber.—Sealed proposals will be received at office of Board of Commissioners of Port of New Orleans, Ibernia Bank & Trust Building, New Orleans, La., until September 17 for furnishing and delivering such lumber and pilings as may be ordered for repairs, etc., for one year from date of contract; deposit, \$1000; bond, \$3000. Specifications, proposal forms, etc., can be obtained from A. C. Bell, engineer, Ibernia Bank Building; usual rights reserved; Wm. A. Kernaghan, vice and acting president.

Lumber.—J. C. Madden & Sons Co., Sapulpa, I. T., will want lumber for glass factory buildings; suitable for main factory, warehouse, storehouse, box factory, etc.

Machine Tools.—See "Punch and Shear."

Machine Tools.—H. E. Graper, Lexington, Tenn., in market for planer, drill, stamping press, foundry equipment, etc.

Machinery Manufacturers.—Robert A. Regester, Guilford and Girard avenues, Baltimore, Md., wants to correspond relative to representing makers of machinery and supplies.

Match-factory Machinery.—C. M. Jordan, Kellville, La., wants machinery for parlor-match factory.

Oil Filter.—T. R. Willard, Columbia, Va., wants oil filter, two or three gallons capacity daily, for use with gas engine.

Piping.—See "Wooden Pipe."

Plate Glass.—J. B. Traywick, Denmark, S. C., will purchase plate glass for \$8500 church.

Pole Lines.—C. T. Schmitt & Co., 9 Clinton street, Newark, N. J., want catalogues and prices on materials and supplies for constructing 10 miles of pole lines for electric-light and railway plant.

Pole-line Materials.—Chickasaw Water-power Co., Lawrence Martin, treasurer, Chickasaw, I. T., wants cedar poles, cross-arms and other materials for pole lines.

Railroad Transit.—W. T. Cheves, Cordele, Ga., wants light mountain railroad transit, new or second-hand.

Marine Engine.—See "Engine."

Mining Equipment.—F. R. Van Antwerp, Mt. Washington, Md., wants steam pumps, air compressor, air receiver, electric pump, electric generator, hoist, etc. (See "Pumps," "Air Compressor," "Electrical Machinery," "Hoisting Equipment.")

Miscellaneous Equipment and Supplies.—Proposals for steam shovel, steam churn drills; air-compressor plant, including air compressors, air receivers, boilers, etc.; tandem compound engine and 100-kilowatt generator, induction motors, etc., will be received at office of H. F. Hodges, General Purchasing Officer, Isthmian Canal Commission, Washington, D. C., until September 25. Blanks and general information relating to Circular No. 288 may be obtained from above office or the offices of the assistant purchasing agents, 24 State street, New York city; Custom-house, New Orleans; 1086 North Point street, San Francisco, and 410 Chamber of Commerce Building, Tacoma, Wash.; also from Chief Quartermaster, Chicago; Depot Quartermaster, St. Louis; Depot Quartermaster, Jeffersonville, Ind., and Chief Quartermaster, Atlanta, Ga., and at U. S. Engineer's office in following cities: Baltimore, Philadelphia, Pittsburg, Boston, Buffalo, Cleveland, Cincinnati, St. Paul, Detroit and Milwaukee.

Naval Supplies.—Proposals will be received at Bureau of Supplies and Accounts, Navy Department, Washington, D. C., until September 10 to furnish at navy-yard, Charleston, S. C., quantity of naval supplies. Schedule 258—Electric cable and supplies, telephone poles. Schedule 261—Voltmeters, etc. Applications for proposals should designate schedules desired by number. Blank proposals furnished on application to navy pay office, Charleston, S. C., or to bureau; E. B. Rogers, Paymaster-General, U. S. N.

Paving.—Board of Mayor and Aldermen, Jasper, Ala., will open bids September 5 for paving number of streets with cement and curbing same with cement blocks. All grading, excavating, etc., to be done by contractor. Plans, specifications, etc., can be seen at office of L. M. Smith, City Clerk; G. H. Guttery, Mayor.

Pump.—Frank Wright, Cave Springs, Ga., wants small steam pump to convey water from well to tank.

Pump.—Boyle Manufacturing Co., Jamesville, N. C., wants duplex pump; good second-hand.

Pumps.—F. R. Van Antwerp, Mt. Washington, Md., wants three steam pumps, capacity 250 gallons per minute; new or second-hand in good order; also an electric pump, capacity eight gallons per minute for 300 feet.

Punch and Shear.—R. W. Herfurth & Co., 41 Cortlandt street, New York, wants second-hand punch and shear; to punch one-half-inch disc one-half inch thick; give full description and price.

Railroad Construction and Materials.—Little Rock & Pine Bluff Traction Co., J. J. Fiske, president, 501 Main street, Little Rock, Ark., wants estimates from contractors on grading in sections, bridging, track-laying, overhead construction, erection of power-house; also prices on wire, steel-bridge materials, overhead-construction materials, power-house equipment, cars, etc., for 50-mile interurban railway.

Railroad Equipment.—Tatum Lumber Co., Hattiesburg, Miss., in market for two miles 45-pound steel rail and fastenings; either new or good relay.

Railway (Electric) Cars.—See "Railroad Construction and Materials."

Railway Equipment.—H. M. de Montmolin, Palatka, Fla., wants to correspond with manufacturers of chilled car and truck wheels with a view to taking agencies.

Railway Rails.—American Metallic Packing Co., Lexington, Ky., wants to lease 12 miles of 40 to 50-pound steel railway rails. Quote best terms and give full particulars in first letter.

Road Improvements.—City of Wheeling, W. Va., will open bids September 9 for grading and concrete masonry for reconstructing "Top Mill Road," according to plans and specifications on file in office of C. B. Cooke, City Engineer. Certified check, \$1000, payable to city of Wheeling. Address proposals

to C. B. Cooke, City Engineer. Usual rights reserved.

Roofing.—Rev. J. Henry Bush, 1108 Highland avenue, Montgomery, Ala., wants prices on metal or other fireproof roofing for \$10,000 to \$15,000 church. Will need 14 squares hip roofing, 47 squares gabled roofing, 75 linear feet hip shingles, 100 linear feet ridge roll and 120 feet valley.

Roofing.—J. C. Madden & Sons Co., Sapulpa, I. T., wants roofing for glass-factory buildings.

Saw.—Thomasville Chair Co., Thomasville, N. C., in market for self-feed circular rip saw; new or second-hand.

Sawmill Machinery.—Garbutt & Donovan Manufacturing Co., Lyons, Ga., in market for sawmill machinery.

Scale Manufacturers.—Charles Miner, Charlotte, N. C., wants blueprints for foundation plans for installation of Champion and United States Standard scales.

Seating.—J. B. Traywick, Denmark, S. C., will purchase pews for \$8500 church.

Sewer Construction.—Bids will be opened September 19 for materials and labor for system of house sewers complete at Canton, Miss.; approximately seven miles of 18 to 6-inch pipe sewers; deposit, 3 per cent. of bid. For specifications and further information address Walter G. Kirkpatrick, engineer, Jackson, Miss.; O. S. Miller of Canton, Mayor.

Shafting.—Blue Ridge Bending Co., Lenoir, N. C., wants 53 feet 2 7/16-inch line shafting, also six post hangers for same.

Shingle-mill Machinery.—Garbutt & Donovan Manufacturing Co., Lyons, Ga., is in market for shingle-mill machinery.

Steel Ceiling.—Rev. J. Henry Bush, 1108 Highland avenue, Montgomery, Ala., wants estimates on steel ceiling for church building as follows: One room, 35x43 feet; one room, 28x43 feet; vestibule, 7x21 feet; tower, 12x12 1/2 feet; tower, 9x9 feet.

Table Legs.—B. M. Root Company, York, Pa., wants addresses of manufacturers marketing finished table legs.

Tanks.—See "Windmills."

Turpentine Apparatus.—See "Distilling Machinery."

Wagon Manufacturers.—Citizens' Ice & Manufacturing Co., Ltd., Houma, La., wants to correspond with manufacturers of ice wagons.

Water-wheels.—C. T. Schmitt & Co., 9 Clinton street, Newark, N. J., want catalogues of water turbines.

Water-wheel Equipment.—See "Electrical Machinery mentioning Chiskasha Company."

Water-works.—Sealed bids will be opened September 13 for materials and labor, sep-

arately or together, for constructing hydro-electric water-works and lighting plant at Lawrenceburg, Tenn.; three 30-inch turbines; dynamo, induction motor and arc lights, centrifugal or duplex pump, steel tower and tank, cast-iron pipe, hydrants and valves, cyclopan or reinforced-concrete dam, reinforced-concrete penstock and power-house, installing machinery, electric-line construction, pipelaying. For specifications address Walter G. Kirkpatrick, engineer, Jackson, Miss.

Water-works.—Sealed proposals, in triplicate, will be received until September 26 for constructing 200,000-gallon reinforced concrete reservoir, installing one steam pump and one steam air compressor and extending water mains. United States reserves right to accept or reject any or all bids or any part thereof. Information furnished upon application. Address Lieut. A. L. Rhoades, Quartermaster, Fort Barrancas, Fla.

Water-works Equipment.—Burns & McDonnell, 821 Scarritt Building, Kansas City, Mo., want catalogues of water-works machinery and supplies for reference in engineering office.

Wheel Machinery.—Fr. Gronarz, Landaustrasse 3, Cassel, Germany, wants to correspond with makers of machinery for manufacturing wheel boxes, spokes and felloes.

Windmills.—Garland B. Miller, Falfurrias, Texas, wants to correspond with manufacturers of windmills and tower tanks.

Wire Fencing.—Garland B. Miller, Falfurrias, Texas, wants to correspond with manufacturers of ornamental fencing, especially woven-wire fencing.

Wooden Pipe.—Garland B. Miller, Falfurrias, Texas, wants to correspond with manufacturers of wooden pipe.

Woodworking Machinery.—See "Handle Machinery."

Woodworking Machinery.—See "Match-factory Machinery."

Woodworking Machinery.—See "Wheel Machinery." See "Embossing Machinery."

Woodworking Machinery.—See "Cob Pipe Machinery."

Woodworking Machinery.—Thomasville Chair Co., Thomasville, N. C., wants spindle-shaper. See "Chair Machinery."

Woodworking Machinery.—Blue Ridge Bending Co., Lenoir, N. C., wants 10-inch molding machine, self-feeding rip saw and swing cut-off saw.

Woodworking Machinery.—Z. V. Harrell, Mt. Olive, N. C., wants automatic turning lathe, second-hand, good condition.

Woodworking Machinery.—C. W. Barrino, Marshallville, N. C., wants prices and catalogues of gangs, rip saws and edgers.

INDUSTRIAL NEWS OF INTEREST

Wants Car-Wheel Agency.

Manufacturers of chilled car and truck wheels are invited to correspond with H. M. de Montmolin of Palatka, Fla. He wants to secure agencies.

Sand-Rock Deposit Offered.

Now offered for sale is a deposit of sand rock suitable for bridge work, monuments, buildings, etc. Write to Mrs. Louisa Speigle, Waynesburg, Ky., for details.

To Furnish Capitol Hardware.

Proposals for furnishing the finished hardware for the Kentucky Capitol at Frankfort, Ky., were opened last week. Contract was awarded at \$7693 to the Russell-Irwin Company of New Britain, Conn.

Regarding Soapstone Deposits.

Dr. J. W. Douglass of Douglass, S. C., is desirous of corresponding with experienced parties who can furnish full information regarding the mining and marketing of soapstone. He owns a tract of soapstone.

Wants Additional Capital.

A Southern firm operating a lumber manufacturing plant has decided to increase its capital stock for the purpose of buying additional timber lands and for operating expenses. Parties desiring to invest in this enterprise may address "Capital," care of Manufacturers' Record.

Car Barns and Shops.

The American Railways Co. of Philadelphia has secured property in Dayton, Ohio, and is about to build car barns and repair shops for the People's Railway Co. Messrs. Dodge & Day, engineers and contractors, of Philadelphia have been commissioned to draw up plans for the construction of the buildings.

Chicago Pneumatic Tool Co.'s Report.

The semi-annual report of the president to the shareholders of the Chicago Pneumatic Tool Co., general offices, Fisher Building, Chicago, Ill., has recently been submitted. The report covers the half year ended June 30 and shows a surplus for that period of \$190,818.88, making a total surplus of \$1,069,228.32. The Chicago Pneumatic Tool Co. manufactures pneumatic tools, air compressors, hoists, electric drills, etc.

Good Record for Long Service.

In a letter to the J. S. Schofield's Sons Company of Macon, Ga., ordering two grate bars (for sawdust) six inches in width and five feet long, the Palatka (Fla.) Gas Light & Fuel Co. states that the grate bars are to be used for a boiler which the J. S. Schofield's Sons Company furnished about 13 years ago. The boiler, the company states, has been operated continuously every night and nearly every day and has never had a leaky tube.

A Dodge & Day Commission.

Messrs. McKesson & Robbins of New York have commissioned Dodge & Day, engineers and constructors, of Philadelphia, to make the additions to their present power plant. The addition will include a new engine, generator and necessary changes to piping, wiring, etc. Messrs. Dodge & Day made a report on power requirements for this firm some time ago and the present work is the result of that report.

The Match-Less Light.

A device which may be used in place of matches, and in a good many instances is much more convenient, is the Match-Less light, intended for use in automobiles, launches, etc. It is not cumbersome, and may be used with equal facility as an elec-

tric cigar lighter and electric inspection lamp. The Match-Less light is manufactured by the Match-Less Light Co., Caxton Building, Cleveland, Ohio.

An Important Pipe Contract.

One of many indications of the importance of some of the leading Southern manufacturing industries is seen in the announcement of the pipe contract awarded by the municipal government of Bristol, Tenn. This contract has been given to the McWane Pipe Works department of the Lynchburg Foundry Co., Lynchburg, Va. It calls for the delivery of three miles of 20-inch cast-iron water pipe by December 1 and amounts to about \$40,000.

The "Marvel" Electric Blower.

One of the most satisfactory pieces of scientific and mechanical construction in the line of blacksmiths' tools recently offered for sale is claimed by its manufacturer to be the "Marvel" electric blower. This blower is operated on an alternating or a direct current, and is claimed to be economical in the use of electricity. It is manufactured by the Electric Blower Co., 111 Clark street, Newton Center, Mass., with factory at 352 Atlantic avenue, Boston.

Messrs. Burns & McDonnell.

Messrs. Burns & McDonnell, civil, hydraulic and sanitary engineers, Kansas City, Mo., have removed their offices to 821, 822 and 823 Scarritt Building. This action will provide the firm more space for offices in which to give the most thorough attention to its increasing clientele in planning and constructing water-works, electric-light plants, sewer systems, etc. Manufacturers are invited to send catalogues of machinery and supplies needed in building the character of plants mentioned.

Sand-Lime Brick Plants.

The Sand-Lime Brick Plant Co., with offices at 20 East 42d street, New York city, has been organized to take over the "Schwarz Scientific System" for the manufacture of sand-lime brick plants. The president of the new company, S. F. White, M. E., is a graduate of Stevens Institute, and has for a number of years been prominently identified with the sulphur industry. Plants for manufacturing sand-lime bricks by "Schwarz Scientific System" have been manufactured for a number of years, and many of them are in successful operation in various parts of the country.

Equipment for Cement Mill.

An order has been placed through Messrs. Westinghouse, Church, Kerr & Co. of New York with the Bradley Pulverizer Co. of 92 State street, Boston, Mass., for Griffin mills for the equipment of the entire grinding plant of the 3000-barrel-per-day Portland-cement works now being erected by the Ajax Portland Cement Co., Independence, Kan. This order was placed after investigation by the expert engineers of Messrs. Westinghouse, Church, Kerr & Co. of different grinding machinery in use. They recommended the Griffin mill to their clients as being in their opinion the best for use in the cement works.

Lupton Fireproof Hollow Metal Windows.

To users of sheet-metal windows, including builders and contractors, it may be interesting to know that the David Lupton Sons Company, Allegheny avenue and Tulp street, Philadelphia, Pa., manufactures 16 standard types. In these types it is claimed that a practical and satisfactory window may be found for every kind of structure. They include the pivoted lower, stationary upper sash; casement sashes hinged to swing both in and out, or hinged at side to open in or out; hinged at sill to open in, or hinged at head to open in or out; single pivoted sash; single vertically-pivoted sash, besides a number of other types.

Hale & Duncan, Mine Equipment.

Messrs. H. C. Hale and F. B. Duncan have formed a partnership under the firm name of Hale & Duncan, at Cleveland, Ohio, to enter the mine-equipment field. Mr. Hale was for many years mechanical engineer and designer for Webster, Camp & Lane Co., and later with Wellman, Seaver & Morgan Co., as mechanical engineer. Since then he has been manager of the Mineral Ridge (Ohio) Manufacturing Co. Mr. Duncan was for several years general superintendent in charge of engineering and manufacturing for Northern Electrical Manufacturing Co., and later manager of the Akron (Ohio) Electrical Manufacturing Co. The success especially of the electrical mining hoisting apparatus installed by these men jointly for their respective firms has led them to or-

ganize the new firm to give special attention to the electrical equipment of coal and other mines. The electrical coal-hoisting apparatus is on the generator voltage control system, and is said to be practically the largest electrical coal-mine hoisting apparatus installed in the United States.

Sales Agent for Manufacturers.

In offering his services as sales agent for manufacturers, Mr. Robert A. Regester of Girard and Guilford avenues, Baltimore, Md., refers to his long experience in manufacturing, having been so engaged for 40 years. He was manager of J. Regester & Sons, the well-known makers of plumbing and foundry supplies, piping, etc. Mr. Regester is in a position to give able attention to the products of manufacturers desiring to establish a trade in Baltimore and vicinity, and he is prepared to correspond with any who may wish representation. He will also act as purchasing agent of machinery and supplies for any enterprises which require the services of an expert in mechanical lines.

E. B. Maltby With Dodge & Day.

Mr. E. B. Maltby, who has been connected with the Panama canal work as principal assistant engineer to J. F. Stevens, has resigned to go with Dodge & Day, engineers and constructors, of Philadelphia. In the capacity of chief engineer, Mr. Maltby has designed over \$1,250,000 worth of dredging plants for the canal work and the preliminary plans, and construction work for the Great Gatun lock and dam were done under his direction. Mr. Maltby graduated from the University of Illinois, class of 1882, and in 1907 received an honorary degree. He has had a long experience in railroad construction work, municipal engineering and irrigation work. He had charge for the United States of dredging operations in the lower Mississippi river and designed and built the lock and movable dam on the Osage River in Missouri.

As to Westinghouse Business.

The July business of the Westinghouse Electric & Manufacturing Co. was considerably above the average. The last information from East Pittsburgh stated that the railway department alone showed a record for orders booked approximating \$2,500,000. Among these were two of more than ordinary importance. The Brooklyn Rapid Transit Co. contracted for 400 electric railway motors, 200 of which, of 200 horse-power each, are for the elevated railroad cars, while the balance, of 60 horse-power each, will be surface car equipment. In connection with the elevated car equipment the company will also furnish the Westinghouse multiple unit control. The other large order comes from the Schoepf Interests of Cincinnati, which control one of the largest urban and interurban electric railway systems in this country, operating cars in Eastern and Central Ohio and Southern Indiana. This order includes a complete equipment of electrical apparatus for 24 substations, consisting of rotary transformers, transformers and switchboard appliances, as well as four Westinghouse turbo-generators, aggregating 25,000 horse-power.

Foundry Output Curtailed by Hot Weather.

In times like the present, when most foundries are running to full capacity, the managers naturally dread the extreme heat, because if it is not impossible for the men to work, it is at least distasteful to them and much time is lost. When it is considered that this condition in a foundry can easily be overcome and at no great cost it is strange that more foundries do not adopt the most modern system of heating and ventilating which makes it possible to cool and ventilate in the summertime and enable the foundry to run continuously. The American Blower Co. of Detroit, Mich., has paid especial attention to this branch of installation and has done some excellent work. The following is a letter which the company received without solicitation, and which will be of general interest to foundry managers: "As you are aware, we installed one of your heating plants in our establishment. In connection with same, desire to say that it has not only given us excellent satisfaction for heating purposes, but has proven equally as satisfactory for reducing the humidity in our workshop. In the foundry, especially during cast time, the heat is almost unbearable in the hot summer days; in fact, the writer has never had any experience during all his foundry practice prior to the present where there was not more or less time lost during the summer months on account of the overbearing heat in the molding-room. It occurred to me that the coils filled with cold water and a fan applied ought to work equally as well for cooling as it does for

heating when coils are filled with steam. We accordingly made the experiment, with a result that we have not lost a single day in our molding-room and have always had the shop at a nice working temperature. It gives us pleasure to make this statement. I know you will be pleased to learn the results. Yours truly, The Bellevue Pipe & Foundry Co., (signed) H. D. Keller, president."

Lubrication of Elevator and Pump Plungers.

Those interested in the lubrication of elevator and pump plungers should know of the system in the building of the Merchants' Warehouse Co. at Chestnut street and Delaware avenue, Philadelphia. Here, under supervision of Harry J. Rockwood, are 16 big plunger elevators, supplied with hydraulic power at 140 pounds pressure by three 14x11 and 20x15 Worthington tandem compound pumps; that is, there are three such pumps there ready for service, but only one of them at a time is needed to do the work. This is because throughout the entire hydraulic system friction has been reduced to such an extremely low point that one pump is enabled to accomplish the work which seemingly would require at least two. Said Mr. Rockwood: "When taking charge of this plant six years ago I received samples of a great many greases, and gave them, one after another, a fair trial. Some of them were pretty poor stuff. One brand hardened so on the elevator plungers that it stopped the plant, and had to be scraped and cut away before the elevator service could be resumed. After a good many more or less troublesome experiences Keystone grease, No. 3 density, was finally adopted, and has ever since given the best of satisfaction." The method of applying is to place 25 pounds at a time in the packing-box of each plunger. This amount lasts about two months, and keeps not only the elevator plungers but the whole system of pumps, pipes and valves lubricated and preserved from corrosion. This is because the grease is carried by the exhaust water from the elevator cylinders to every point in the system. No other lubrication of any kind is employed for the water ends of the pumps than that due to the presence in the water of Keystone grease, and, to illustrate the almost entire absence of friction, it has been observed that after the steam is shut off the plungers will make an entire stroke. The cylinders, valves and joints become so permeated with grease that corrosion is impossible, and it is never at all difficult to break joints or remove parts when desired. As an example of the preserving properties of this circulation of grease-saturated water it is interesting to note that some of the three-and-one-half-inch hard-rubber valves in the pumps have been in service for six years, and it has not yet been necessary to replace any that were put in new since this grease has been used. The leather caps in the change-valve cylinders, which have to meet very severe usage, last from nine months to two years. For the elevator plungers Mr. Rockwood uses an especial packing of his own invention. It is a combination of leather, rubber and "flax hydraulic packing," and the first placed in the packing boxes, 21 months ago, is as tight today as when put in. The Keystone Lubricating Co. of Philadelphia, Pa., manufactures the grease mentioned.

TRADE LITERATURE.

Penberthy Engineer and Fireman.

The Penberthy Engineer and Fireman, a publication issued monthly by the Penberthy Injector Co. of Detroit, Mich., is being circulated for August. Among other interesting features this edition contains articles on "Superheated Steam in Power Plants," "Burning Ashes," "Increasing the Speed of Engines," "Hydrostatic Test, Horizontal Return Tubular Boilers," etc.

"Everbest" Magazine.

The "Everbest" magazine for August is being distributed by the Ewing-Merkle Electric Co., 1106 Pine street, St. Louis, Mo. This publication is devoted to the interest of electrical machines and appliances, and contains articles for general entertainment. The edition referred to presents articles on "The Best Light," "The Electrical Laundry Iron as a Central-Station Business-Getter," "Electrically-Driven Hydraulic Elevators," etc.

Installations of Cooper Hewitt Lamps

In a pamphlet which is now being circulated by the Cooper Hewitt Electric Co., 220 West 29th street, New York city, a comprehensive enumeration is presented of some of the typical installations of lamps which this company has made. They include in-

stallations for automobile factories, repair shops, breweries and bottling plants, machine shops, cotton mills, foundries, locomotive works, offices, power plants, printing plants, rolling mills, etc., and have been installed for some of the largest industrial enterprises.

Announces Its Policy.

In announcing its policy toward customers the Haines, Jones & Cadbury Company, 1130-1144 Ridge avenue, Philadelphia, Pa., is distributing an artistic folder which states that the policy of the company is to make its customers' interests identical with its own. In the matter of mistakes, the company states that it cannot eliminate them entirely, but makes every effort to correct them promptly and thoroughly and to make a liberal adjustment of every reasonable claim. The Haines, Jones & Cadbury Co. manufactures plumbing supplies, and has branches at San Francisco, Cal., and Savannah, Ga.

The "Burroughs."

The "Burroughs" for August, a publication by the Burroughs Adding Machine Co. of Detroit, Mich., in the interest of its manufacturing, selling and office organizations, is now being circulated. The pamphlet contains a number of interesting features, including the address of General Manager Alvan Macauley before the agents' convention, in which he referred to the increased number of sales by his company as indicating the general prosperity of the whole country. Reference is also made in the publication to the Burroughs motor car, which is a runabout specially designed to hold two sample machines securely and without jar.

Concrete Cottages.

To meet the demand for information concerning the construction of small concrete houses the Atlas Portland Cement Co., 20 Broad street, New York city, obtained permission from the Association of American Portland Cement Manufacturers, Philadelphia, Pa., to reproduce some of the successful designs submitted in the "Competition for Concrete Houses." These reproductions have been arranged in the form of a pamphlet which shows several types of concrete cottages, together with flooring plans, specifications and the comments of the committee awarding the prizes. The pamphlets are for free distribution and may be obtained from the Atlas Portland Cement Co.

Relative to Fuel Economy.

"Fuel Economizers at the Manhattan Power Station of the Interborough Rapid Transit Co., New York City," is a reprint of a paper read by R. D. Tomlinson before the New York Railway Club, and shows by a careful analysis of tests and monthly records that the economizers in this plant are paying a net rate of 39.5 per cent. upon the initial outlay. This is based upon a price of \$3 per ton for coal and the average load at the time the economizers were put in. The output of the plant has been increased since the test was made. The plant contains 64 boilers of 520 horse-power each, and the draft is produced by four brick chimneys. The pamphlet is well illustrated and should be of interest to designers and operators of large steam plants. It may be obtained by addressing the Green Fuel Economizer Co. of Matteawan, N. Y.

A Colonial City.

Surrounded by a wall of verdant green, overlooking the great waterway of Hampton Roads, is the Colonial City, created as a remembrance of the first landing of English colonists on American soil. The Jamestown Exposition is now said to be complete and wants every American citizen to come and view what has been designed for the education and amusement of the people. There is an abundance of good food at reasonable prices, together with good sleeping accommodations and transportation facilities. The exposition grounds are near Norfolk, Va., a rapidly-developing industrial center, located on one of the finest harbors in the world. It has been described as the city of the splendid present and wonderful future. A folder issued by the Board of Trade and Business Men's Association contains interesting data concerning the city, with a brief description of the Jamestown Exposition.

Mine and Quarry.

The August issue of Mine and Quarry, a quarterly bulletin of news for superintendents, managers, engineers and contractors, published by the advertising department of the Sullivan Machinery Co., Railway Exchange Building, Chicago, Ill., is being distributed. An editorial reference is made to the advantages and economy of a central compressed-air power plant for operating

scattered machines of various kinds on contract work, as illustrated in the construction of the Susquehanna river dam at McCall Ferry, Pa. The publication also contains articles on "Soapstone" and "Coal Mining in the Indian Territory," "Air Power in the Construction of the McCall Ferry Dam," "The Lead and Zinc Deposits of the Southwest," "Hudson River Crossing of the New York Water Supply Aqueduct" and "A Straight-Line Corliss Air Compressor." The Sullivan Machinery Co. manufactures mine and quarry machinery of different varieties.

Hydraulic Pumps and Accessories.

Superseding its catalogue No. 56, the Watson-Stillman Company, Havemeyer Building, 25 Dey street, New York city, has issued sectional catalogue No. 71. This publication is an assortment of sheets selected from over 800 pages of literature especially relating to hydraulic pumps and accessories. It contains a number of pages of entirely new data, while several pages represent alterations in the details or variations in the cuts. A type of pump shown is said to be of a new form of construction in that it improves on the accessibility of the small parts, while keeping the strains entirely within direct tension parts. Attention is also called to the pump, whose capacity is rated at 800 gallons at 30 revolutions per minute, with a working pressure of 1000 pounds per square inch. The Watson-Stillman Company manufactures high-pressure hydraulic tools for a variety of purposes, and is prepared to make special machines for special work.

Kahn System Standards.

The rapid growth of reinforced concrete construction makes almost necessary a handbook on design similar to those in use for ordinary classes of building material. In many cases the only data which has been available to the architect or engineer has been the scientific textbook, in which information has been of little practical value. A handbook which is intended to present to the designer tables and information in such form as to be immediately available for use in actual designs, and at the same time to have these tables founded on scientific formulae approved by practical engineers, has recently been compiled and published by the engineering department of the Trussed Concrete Steel Co. of Detroit, Mich. The publication referred to is the Kahn system standards, which has been carefully compiled by engineers of extensive practical experience, and covers the design and construction of over 1000 structures, including buildings, bridges, tunnels, reservoirs, etc. The work as presented deals mainly with the Kahn trussed bar. This system of reinforced concrete includes in its application the Kahn rib metal and the Kahn cup-bar. The Kahn rib metal consists of a series of straight bars or ribs connected laterally by light cross-members rigidly attached to the ribs. The material is made in sheets consisting of nine ribs, and is supplied in meshes from two to eight inches, varying by inches. The cup-bar is a specially-rolled section with cross-ribs scientifically designed so that the bar cannot slip in the concrete. Advantages claimed for it are that the fibers of steel are not distorted in the process of rolling and that it develops a greater strength than any other bar having the same net area, because it has been rolled or worked in such manner as to develop a more uniform and more compact fiber structure. In the application of these three types of reinforcement in concrete construction the Kahn system standards should be a valuable aid. The company also publishes special literature descriptive of the Kahn rib metal and the Kahn cup-bar, which will be sent to those interested.

Southern Pig-Iron Output.

Mr. C. A. Stillman, the manager of the Birmingham office of Rogers, Brown & Co., in discussing the recent article in the MANUFACTURERS' RECORD showing iron production in the South has not kept pace with the increase in other sections, writes:

"For the 15 years preceding 1895 there were a great many furnaces built in the South, the proportion being larger than in other sections of the country. Most of the stacks were erected by land companies or by promoters endeavoring to boom some town and help sell city lots. Many of these plants were badly located, and with little financial backing it was not surprising that after the city lots were sold the furnaces were abandoned. During the

past 10 years the principal developments in the Southern iron world has been along the lines of reorganization and consolidation, this important work being done by men largely interested in the iron business and anxious to place this industry in the South on a firm basis. The result has been that small companies with insufficient capital to operate have been taken over by large and strong corporations, while some of the small companies have been consolidated, additional money furnished for improvements and working capital, and in this way strong independent companies operating several furnaces, owning their own raw materials, have sprung into existence from what might have been termed 'scrap heaps and fanatical failures.' So, therefore, while the tonnage produced in the South year by year shows little advancement, yet the work done has indeed been very important and much more lasting than the flashlight construction of furnaces incident to the booming of town properties.

"During the past few years vast sums of money have been spent by the large iron-producing companies in the South. Most of this has been expended to replace antiquated machinery and equipment at mines and furnaces by the installation of modern appliances of the best construction. The smaller furnaces are being torn down and larger stacks are being constructed in their stead. Therefore, in reality the owners of Southern iron properties have by no means been idle, but, on the contrary, have been building for the future and laying the foundation for an industry stable in its nature and profitable in its operation.

"But far more important to the South than the increase of pig-iron production is the more profitable increase in pig-iron consumption, which has nearly doubled within the past six years, and fully kept pace with the increased production of pig-iron in the United States. In 1900 only about 30 per cent. of the pig-iron made in the South was consumed by Southern industries, while at the present time less than 40 per cent. of Southern pig-iron is shipped, 60 per cent. being remelted in the South.

"While the lion's share of Southern coal and ore and property is held by the larger companies, they by no means have a monopoly. Raw material in the South suitable for the manufacture of pig-iron is found in almost inexhaustible quantities, and, as demand increases, the time is not far distant when other furnaces will rise up in the South, where the iron industry is neither dead nor lying dormant, but is becoming firmly established, and in its own way is preparing for the survival of the fittest."

FINANCIAL NEWS

The MANUFACTURERS' RECORD invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

Review of the Baltimore Market.

Office MANUFACTURERS' RECORD, Baltimore, Md., September 4.

A double holiday and summer weather combined to make the past week in the Baltimore stock market generally dull and listless, but at the end of the period there was a slight manifestation of activity, with a tendency toward better prices.

In the trading United Railways common sold at 11½; the income bonds from 50¼ to 52; the funding 5s at 78 to 78½; the funding scrip at 78½; the first 4s from 86 to 86½, and ex-coupon at 84¼ to 84½; Gas 6s, 102½ to 103; Seaboard 4s, 68 to 70; Cotton Duck 5s, 79½ to 79½;

G.-B.-S. firsts, 50¼ to 50½; Gas 5s, 107½; do. 4½s, 92¼ to 92½.

Citizens' Bank sold at 33; Maryland Casualty at 60.

Other securities were traded in as follows: Northern Central Railway stock, 88¼ to 89; Atlantic Coast Line 4s, 89½ to 87½; Western Maryland 4s, 70 to 70½; West Virginia Central 6s, 102¼; Reisterstown Turnpike, 1½; Florida Southern 4s, 85; Carolina Central 4s, 89; Georgia Southern & Florida 5s, 105½ to 106; Merchants & Miners' Transportation Co., trust certificates, 25; George's Creek Coal & Iron, 75; Baltimore City 3½s, 1928, 95.

SECURITIES AT BALTIMORE.

Last Quotations for the Week Ended September 4, 1907.

Railroad Stocks.	Par.	Bid.	Asked.
Atlantic Coast Line.....	100	82½	83
Atlantic Coast Line of Conn.....	100	258	258
Norfolk Railway & Light.....	25	163½	164
Seaboard Company Common.....	100	113½	114
Seaboard Company 1st Pfd.....	100	50	60
Seaboard Company 2d Pfd.....	100	23	42
United Railways & Elec. Co.....	50	12	12

Bank Stocks.	Par.	Bid.	Asked.
Farmers & Mer. Nat. Bank.....	40	50	50
First National Bank.....	100	120	120
Maryland National Bank.....	20	16	16
Merchants' National Bank.....	100	171	171
National Bank of Baltimore.....	100	119	125
National Marine Bank.....	30	37½	38
National Mechanics' Bank.....	10	25	25
Third National Bank.....	100	109¼	115

Trust, Fidelity and Casualty Stocks.	Par.	Bid.	Asked.
Continental Trust.....	100	160	175
Fidelity & Deposit.....	50	119	126
Maryland Casualty.....	25	60	60
Mercantile Trust & Deposit.....	50	117	120
U. S. Fidelity & Guaranty.....	100	105	108½

Miscellaneous Stocks.	Par.	Bid.	Asked.
Con. Cotton Duck Common.....	50	9	10½
Consolidated Coal.....	100	86	86
G.-B.-S. Brewing Co.....	100	3	5

Railroad Bonds.	Par.	Bid.	Asked.
Atlanta & Charlotte Ext. 4½s.....	98	99	99
Atlantic Coast Line 1st 4s, 1925.....	87½	88	88
Carolina Central 4s, 1949.....	88	88	88
Charlotte & West Car. 5s, 1925.....	106	106	106
Columbia & Greenville 1st 5s, 1916.....	107½	107½	107½
Georgia & Alabama 5s, 1945.....	102½	102½	102½
Georgia, Car. & North. 1st 5s, 1929.....	103	103	103
Georgia Pacific 1st 6s, 1922.....	110	110	110
Georgia Sou. & Fla. 1st 5s, 1945.....	105½	106	106
Piedmont & Cum. 1st 5s, 1911.....	95	99	99
Richmond & Danville Deb. 5s.....	102½	103½	103½
Seaboard Air Line 4s, 1920.....	94	95	95
Seaboard Air Line 5s, 10-year, 1911.....	94	95	95
South Bound 5s, 1941.....	102½	102½	102½
Western Maryland new 4s, 1925.....	70¾	72½	72½
West Virginia Cen. 1st 6s, 1911.....	102¾	103	103
Wilmington, Col. & Aug. 6s, 1910.....	102¾	103	103
Wilmington & Wel. Gold 5s, 1935.....	109½	109½	109½
Wilmington & Weldon 4s.....	96	96	96

Street Railway Bonds.	Par.	Bid.	Asked.
Anacostia & Potomac 5s, 1945.....	99	100	100
Baltimore City Passenger 5s, 1911.....	101½	101½	101½
Baltimore Traction 1st 5s, 1920.....	108	108	108
Charleston City Railway 5s, 1923.....	104	104	104
Charleston Cen. Elec. 5s, 1909.....	92	92	92
City & Suburban 5s (Balto.), 1922.....	106½	106½	106½
City & Suburban 5s (Wash.), 1948.....	100	100	100
Lake Roland Elevated 5s, 1942.....	108½	108½	108½
Norfolk Railway & Light 5s.....	94½	95	95
United Railways 1st 4s, 1949.....	84½	85	85
United Railways 1st 5s, 1949.....	51¾	52	52
United Railways Funding 5s.....	78½	78½	78½

Miscellaneous Bonds.	Par.	Bid.	Asked.
Ala. Cen. Coal & Iron 5s.....	84	84	84
Consolidated Gas 6s, 1910.....	102¾	103	103
Consolidated Gas 5s, 1933.....	107	107	107
Consolidated Gas 4½s.....	91	92½	92½
G.-B.-S. Brewing 1sts.....	48	49	49
G.-B.-S. Brewing 2d Income.....	20¼	21¼	21¼
Mt. Vernon-Woodby Cot. Duck 5s.....	76½	77¼	77¼

SOUTHERN COTTON-MILL STOCKS.

Quotations Furnished by Hugh MacRae & Co., Wilmington, N. C., for Week Ending September 2.

	Par.	Bid.	Asked.
Abbeville Cotton Mills (S. C.).....	91	91	91
Aiken Mfg. Co. (S. C.).....	91	91	91
American Spinning Co. (S. C.).....	140	140	140
Anderson Cotton Mills (S. C.).....	75	75	75
Arkwright Mills (S. C.).....	112	115	115
Augusta Factory (Ga.).....	125	125	125
Avondale Mills (Ala.).....	125	125	125
Belton Mills (S. C.).....	110	112	112
Bibb Mfg. Co. (Ga.).....	113½	113½	113½
Brandon Mills (S. C.).....	125	135	135
Cabarrus Cotton Mills (N. C.).....	127	135	135
Chadwick Mfg. Co. (N. C.) Pfd.....	97	97	97
Chilcota Mfg. Co. (S. C.).....	121	121	121
Clifton Mfg. Co. (S. C.).....	115	120	120
Clifton Mfg. Co. (S. C.) Pfd.....	101	101	101
Clinton Cotton Mills (S. C.).....	147	147	147
Columbus Mfg. Co. (Ga.).....	96	101	101
Courtenay Mfg. Co. (S. C.).....	100	100	100
Dallas Mfg. Co. (Ala.).....	96	100	100
Darlington Mfg. Co. (S. C.).....	80	82	82
Eagle & Phenix Mills (Ga.).....	130	137½	137½
Easley Cotton Mills (S. C.).....	146	146	146
Enoree Mfg. Co. (S. C.).....	70	80	80
Enoree Mfg. Co. (S. C.) Pfd.....	93	100	100
Enterprise Mfg. Co. (Ga.).....	90	94	94
Exposition Cotton Mills (Ga.).....	225	240	240
Gaffney Mfg. Co. (S. C.).....	92	95	95
Gainesville Cotton Mills (Ga.).....	59	63	63
Granby Cot. Mills (S. C.) 1st Pfd.....	47½	50½	50½
Grantville Mfg. Co. (S. C.).....	165	170	170
Greenwood Cotton Mills (S. C.).....	97	98½	98½
Grendel Mills (S. C.).....	119	119	119
Henrietta Mills (N. C.).....	161	175	175
King Mfg. Co., John P. (Ga.).....	97	100	100
Lancaster Cotton Mills (S. C.).....	110	110	110
Lancaster Cot. Mills (S. C.) Pfd.....	98	98	98
Langley Mfg. Co. (S. C.).....	100	100	100
Laurens Cotton Mills (S. C.).....	160	160	160
Limestone Mills (S. C.).....	140	140	140
Lockhart Mills (S. C.).....	92	96	96

Lockhart Mills (S. C.) Pfd.....	97	100
Louise Mills (N. C.).....	90	95
Louise Mills (N. C.) Pfd.....	98	98
Marboro Cotton Mills (S. C.).....	92	93
Mayo Mills (S. C.).....	165	185
Mills Mfg. Co. (S. C.).....	110	110
Mills Mfg. Co. (S. C.) Pfd.....	101	101
Monaghan Mills (S. C.).....	109½	109½
Monarch Cotton Mills (S. C.).....	102	107½
Newberry Cotton Mills (S. C.).....	140	150
Norris Cotton Mills (S. C.).....	122	122
Olympia Cot. Mills (S. C.) 1st Pfd.....	70	71
Orangeburg Mfg. Co. (S. C.) 1st Pfd.....	80	97
Orr Cotton Mills (S. C.).....	107	108½
Pacolet Mfg. Co. (S. C.).....	175	175
Pacolet Mfg. Co. (S. C.) Pfd.....	100½	101
Pelzer Mfg. Co. (S. C.).....	165	175
Piedmont Mfg. Co. (S. C.).....	165	175
Poe Mfg. Co. (S. C.).....	135	135
Raleigh Cotton Mills (N. C.).....	100	105
Richland Cot. Mills (S. C.) Pfd.....	59	59
Roanoke Mills (N. C.).....	165	165
Saxon Mills (S. C.).....	125	125
Sibley Mfg. Co. (Ga.).....	63	65
Spartan Mills (S. C.).....	150	155
Springstein Mills (S. C.).....	100	100
Trion Mfg. Co. (Ga.).....	137½	137½
Tucapau Mills (S. C.).....	195	200
Union-Buttall Mills Co. 1st Pfd.....	72½	72½
Union Mfg. Co. (S. C.).....	133½	135
Warren Mfg. Co. (S. C.).....	92	93½
Warren Mfg. Co. (S. C.) Pfd.....	103	103
Washington Mills (Va.).....	30	40
Washington Mills (Va.) Pfd.....	100	115
Whitney Mfg. Co. (S. C.).....	145	160
Wicassett Mills (N. C.).....	127	135
Woodruff Cotton Mills (S. C.).....	127	135

Quotations Furnished by William S. Glenn, Broker, Spartanburg, S. C., for Week Ending September 2.

	Bid.	Asked
Abbeville Cotton Mills (S. C.).....	90	93
Aetna Cotton Mills (S. C.) Pfd.....	87	87
Aiken Mfg. Co. (S. C.).....	82	89
American Spinning Co. (S. C.).....	125	125
Anderson Cotton Mills (S. C.).....	80	80
Arcadia Mills (S. C.).....	98	101
Arkwright Cotton Mills (S. C.).....	112	112
Augusta Factory (Ga.).....	80	85
Avondale Mills (Ala.).....	110	110
Belton Mills (S. C.).....	109	109
Bibb Mfg. Co. (Ga.).....	115	115
Brandon Mills (S. C.).....	125	125
Brown Mfg. Co. (S. C.).....	67	62
Cabarrus Cotton Mills (N. C.).....	120	103
Chadwick Mfg. Co. (N. C.) Pfd.....	103	103
Chilcota Mfg. Co. (S. C.).....	122	122
Clifton Mfg. Co. (S. C.).....	117	117
Clifton Mfg. Co. (S. C.) Pfd.....	103	103
Clinton Cotton Mills (S. C.).....	155	155
Columbus Mfg. Co. (Ga.).....	94	97
Courtenay Mfg. Co. (S. C.).....	100	100
Dallas Mfg. Co. (S. C.).....	92	96
Darlington Mfg. Co. (S. C.).....	80	85
D. E. Converse Co. (S. C.).....	112	112
Eagle & Phenix Mills (Ga.).....	128	135
Enoree Cotton Mills (S. C.).....	130	136
Enoree Mfg. Co. (S. C.).....	70	82
Enoree Mfg. Co. (S. C.) Pfd.....	100	102
Enterprise Mfg. Co. (Ga.).....	82	90
Exposition Cotton Mills (Ga.).....	225	225
Gaffney Mfg. Co. (S. C.).....	90	95
Gainesville Cotton Mills (Ga.).....	50	60
Glenwood Cotton Mills (S. C.).....	112	112
Gluck Mills (S. C.).....	94	98
Granby Cot. Mills (S. C.) 1st Pfd.....	50	50
Grantville Mfg. Co. (S. C.).....	160	165
Greenwood Cotton Mills (S. C.).....	94	98
Grendel Mills (S. C.).....	117	117
Hartsfield Cotton Mill (S. C.).....	120	120
Henrietta Mills (N. C.).....	165	165
Inman Mills (S. C.).....	103	110
King Mfg. Co., J. P. (Ga.).....	97	103
Lancaster Cotton Mills (S. C.).....	102	110
Lancaster Cot. Mills (S. C.) Pfd.....	92	99
Langley Mfg. Co. (S. C.).....	92	96
Laurens Mills (S. C.).....	150	162
Limestone Mills (S. C.).....	140	140
Lockhart Mills (S. C.).....	96	101
Lockhart Mills (S. C.) Pfd.....	101	101
Lory Cotton Mills (N. C.) Pfd.....	99	105
Louise Mills (N. C.).....	90	95
Louise Mills (N. C.) Pfd.....	95	102
Marlboro Cotton Mills (S. C.).....	90	90
Mayo Mills (N. C.).....	150	200
Mills Mfg. Co. (S. C.).....	109	109
Molloy Mfg. Co. (S. C.).....	103	103
Monaghan Mills (S. C.).....	112	112
Monarch Cotton Mills (S. C.).....	105	110
Newberry Cotton Mills (S. C.).....	127	127
Ninety-Six Cotton Mills (S. C.).....	115	115
Norrix Cotton Mills (S. C.).....	106	106
Ode Mfg. Co. (S. C.).....	70	80
Olympia Cotton Mills (S. C.).....	70	80
Orangeburg Mfg. Co. (S. C.) Pfd.....	80	80
Orr Cotton Mills (S. C.).....	107	107
Pacolet Mfg. Co. (S. C.).....	165	180
Pacolet Mfg. Co. (S. C.) Pfd.....	101	104
Pelzer Mfg. Co. (S. C.).....	167	175
Piedmont Mfg. Co. (S. C.).....	167	167
Poe Mfg. Co., F. W. (S. C.).....	125	130
Releigh Cotton Mills (N. C.).....	94	100
Richard Cot. Mills (S. C.) Pfd.....	59	59
Roanoke Mills (N. C.).....	118	118
Saxon Mills (S. C.).....	123	125
Sibley Mfg. Co. (Ga.).....	58	63
Southern Cotton Mills (N. C.).....	63	63
Spartan Mills (S. C.).....	149	152
Springside Mills (S. C.).....	100	100
Stapleton Mfg. Co. (Ga.).....	132	140
Tucupau Mills (S. C.).....	205	205
Union-Buffalo 1st Pfd.....	70	75
Union-Buffalo 2d Pfd.....	20	27
Victor Mfg. Co. (S. C.).....	130	130
Warren Mfg. Co. (S. C.).....	97	100
Warren Mfg. Co. (S. C.) Pfd.....	106	107
Washington Mills (Va.).....	25	25
Washington 2d Pfd.....	105	105
Whitney Mfg. Co. (S. C.).....	150	150
Wiscasset Mills (N. C.).....	119	119
Woodruff Cotton Mills (S. C.).....	135	140

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